THE

Croonian Lectures

ON

FUNCTIONAL DERANGEMENTS OF THE LIVER.

Delivered at the Royal College of Physicians,

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LECTURE III.—PART II.

2. *A deficient supply of oxygen.*—Insufficient muscular exercise in the open air may derange the functions of the liver. It is well known that sedentary habits and confinement in badly ventilated rooms tend to induce derangements of the liver. It is also a common observation that persons who have eaten and drunk too freely have not suffered from their livers so long as they have lived an active life in the open air; but that as soon as, from change of occupation or other causes, they take to sedentary habits, without any corresponding change in diet, derangement of the liver ensues. Again, every sportsman who has suffered from hepatic derangement knows the effect of a single day's hunting or shooting in clearing his complexion and relieving his symptoms. A want of regular exercise in the open air leads to derangement of the liver in two ways: namely, (*a*) by causing a deficient supply of oxygen to the system, as the result of which the oxidising processes which go on in the liver and elsewhere are imperfectly performed, and there is a tendency to the accumulation in the system of fat and of the imperfectly oxidised products of disintegrated albumen. Oxygen is, so to speak, the antidote necessary for the destruction of a *materies morbi* (lithic acid, &c.), produced by imperfectly oxidised albumen. (*b*) By retarding the circulation of blood through the liver. Since the time of Haller,* physiologists have recognised the influence of the respiratory movements in promoting the circulation of blood through the liver; but, upwards of thirty years ago, Mr. Alexander Shaw, in a paper which has attracted too little notice,† showed more clearly than ever before that the circulation of blood through the liver was greatly influenced by the alternate expansion and contraction of the thorax during respiration. Mr. Shaw called attention to the fact that the portal vein, without any provision for increasing its power, or any assistance beyond that *vis à tergo* which belongs to the veins generally, and being even destitute of valves to protect it from regurgitation of blood like the veins in other parts of the body, has to perform the duty usually fulfilled by an artery, which, besides receiving an impulse from the heart, is aided in distributing its blood by the contractility and elasticity of its coats. He suggested that this weak power by which the portal vein propelled its blood was compensated for by a suction-force communicated to the current of blood by the actions of respiration; the deeper the inspiration, the greater the force with which the blood rushes by the large veins to the right auricle. These reasonings have been confirmed by certain experiments of M. Bernard, who found that, when an incision is made into a lobe of the liver in a living animal, the blood may be seen to jet from the mouths of the hepatic veins during the movements of expiration, but to return sucking in air with it at each deep inspiration, so that the animal soon dies from the passage of air into the heart.‡ In persons, then, who lead a sedentary life this auxiliary force for promoting the circulation of blood through the liver is diminished; blood stagnates in the gland, and the functions of the organ are deranged, these results being all the more likely to arise if the liver be at the same time over-stimulated by errors in diet.

3. *A high temperature* favours certain functional derangements of the liver, and particularly those relating to sanguification and disintegration of albumen. Functional derangements, as well as congestion and inflammation of the liver, are more apt to occur in tropical than in temperate climates, and in our own country the liver more often becomes disordered in summer and autumn than in winter. The diet which is suitable in a cold or temperate climate in the tropics produces hepatic derangement. These results of a heated atmosphere are no doubt due in part to the rarefaction of the air and a corresponding diminution in the supply of oxygen to the system. The hotter the air, the less will be the amount of oxygen in a given volume inhaled by the lungs. But this is, perhaps, not the sole, if the chief, explanation. Experiment has shown that one of the effects of a high temperature upon the lower animals is to produce a degeneration of the parenchyma of the liver, its secreting cells becoming filled with minute granules and presenting appearances similar to those found after death from febrile diseases.* It is possible, then, that some of the functional derangements of the liver from which persons suffer in tropical climates may be owing to similar degenerations, not necessarily permanent, of the secreting cells.

4. *Nervous influences.*—Many facts show the great influence of the nervous system upon the secreting organs. Sudden fear, or other severe mental emotion, has been known to arrest the secretion of milk and saliva, and we have already seen how injuries and diseases of nerve-tissue may produce diabetes by deranging the glycogenous function of the liver. But many other ailments of the liver besides diabetes have a nervous origin. Prolonged mental anxiety, worry, and incessant mental exertion, not only interfere with the proper secretion of bile, but too often derange the processes of sanguification and blood-change, in which the liver is so deeply concerned, and induce lithæmia, with many of the symptoms already described. These results are all the more likely to ensue if the diet has been such as favours hepatic derangement—if, for example, to drown grief, the patient has indulged in stimulants—and the habits have been sedentary. There is also good evidence that nervous agencies may not only cause functional derangement, but even structural disease, of the liver. Acute atrophy, in which the secreting cells are rapidly disintegrated and the functions of the organ arrested, appears in many instances to have a purely nervous origin; very often the first symptoms of the disease have occurred immediately after a severe fright, or an outburst of passion, in a person previously healthy. An impression made upon the brain appears to be reflected to the liver and to derange its nutrition. Many observations have satisfied me that the extrusion of gall-stones from the gall-bladder, as well as their formation, may be traced to nervous agency. Dr. Budd has also observed that mental anxiety or trouble has "great influence in the production of gall-stones";† and I have repeatedly known attacks of biliary colic from gall-stones excited by some sudden emotion. Lastly, even cancer of the liver appears sometimes to result from the functional derangement induced in the first instance by mental trouble. I have been surprised at the frequency with which patients suffering from primary cancer of the liver have traced the commencement of their ill-health to indigestion following protracted grief or anxiety. The cases have been far too numerous to be accounted for on the supposition that the mental distress and the cancer have been mere coincidences. A similar observation has, I believe, been made by Sir Robert Christison and by other eminent authorities.

5. *Constitutional peculiarities.*—In considering the causes of functional derangement of the liver, it must not be forgotten that there are constitutional peculiarities—inherited or acquired—in virtue of which the liver is deranged from causes which, under ordinary circumstances, would be harmless. Most persons, as Dr. Budd observes, have more liver, just as they have more lung, than is absolutely necessary.‡ A portion of their liver may be destroyed by disease, or become less active, without any derangement of the general health. In others, the liver seems only just capable of performing its functions under the most favourable conditions, and it at once breaks down under adverse circumstances of diet, habits, or climate. This innate weakness of the liver is often inherited. The person is born with a

* "Vires quæ sanguinis per hepar motum accelerant."—Haller's Physiologia, 1764, tome vi., p. 601.
† Medical Gazette, July 15th and September 30th, 1842.
‡ London Medical Record, October 15th, 1873, p. 437.

* See Pathological Transactions, 1873, vol. xxiv., p. 266.
† Diseases of the Liver, third edition, 1857, p. 309.
‡ Op. cit., p. 55.

tendency to biliary derangements. Gout and diabetes, which we have found to originate in hepatic derangement, are hereditary diseases; and the liver is always very readily disordered in persons who inherit a tendency to gout. This constitutional tendency to hepatic derangement is too often lost sight of by patients, and perhaps sometimes by their medical advisers. The habitual use of alcohol is often recommended for various ailments by the medical attendant, without due regard to the tendency of the individual to hepatic derangement, and thus serious consequences may ultimately arise from alcohol taken with a medicinal object. Again, a patient often argues that his liver-troubles cannot be due to what he eats or drinks, because he is most careful as compared with friends who indulge largely and suffer nothing, forgetting the adage: "One man's food is another man's poison." One man, for instance, may drink a bottle of wine and be none the worse, whereas another has his liver deranged by a single glass.

6. *Poisons* of various sorts may derange the liver, the persistence of the derangement depending upon the length of exposure to the cause. One of the first effects of the poisons of the various specific fevers is upon the liver. Again, from protracted exposure to malaria, the liver often becomes deranged, anæmia and lithæmia being the results. While some cases of acute atrophy of the liver have a nervous origin, there is good evidence that others are caused by a poison taken into the body from without, or sometimes, as suggested by Dr. Budd, "engendered in the body by faulty digestion and assimilation." Phosphorus also, in sufficient doses, is known to derange the functions of the liver; and one result of phosphorus-poisoning is the production of symptoms and structural changes in the liver closely resembling those of acute atrophy.* Various substances also taken as food, or by mistake along with food, may induce functional disturbance of the liver, the poisonous effect being often determined by some constitutional peculiarity of the individual.

These causes of functional derangement of the liver will, of course, act more injuriously if the functions of the liver be already disordered by structural disease, by disease of the heart or lungs, or by derangements of the stomach and bowels.

D.—Treatment of Functional Derangements of the Liver.

The time at my disposal only permits me to give a brief sketch of the general principles on which functional derangements of the liver ought to be treated; and my remarks will be for the most part restricted to the derangements resulting from abnormal disintegration and abnormal elimination.

1. *Diet.*—In functional derangements of the liver, much more permanent benefit is to be expected from careful regulation of the ingesta than from physic. It must not be forgotten that what may ultimately destroy the body too often enters by the same portal as that which is intended to nourish and maintain it. It is also well to remember that the hepatic derangement resulting in lithæmia may exist for years without any other symptom than the frequent deposit of lithates or lithic acid in the urine, and is then curable by attention to diet alone; but that, if neglected, it may ultimately develop gout, structural disease of the liver or kidneys, or some other serious result. Habitual lithæmia ought therefore to be always counteracted; and, from what has been already stated, it seems clear that the foods mainly to be avoided are saccharine and oleaginous articles, and especially cooked dishes containing both of these substances. Patients with lithæmia ought always to avoid made-up or highly seasoned dishes. In severe cases, potatoes, rice, sago, and fruits may have to be given up, and even bread must be taken in moderation. It will also always be well to ascertain if the lithæmia be due to any of those idiosyncrasies in virtue of which particular articles of diet are apt to derange the liver. In most cases of lithæmia, a diet consisting chiefly of stale bread, plainly cooked mutton, white fish, poultry, game, eggs, a moderate amount of vegetables, and weak tea or coffee answers best. The quantity as well as the quality of the food must be attended to. Habitual lithæmia often results from the patient taking more food than can be converted into tissue or disintegrated in the liver. As Dr. Bence Jones has observed with regard to gout, so in habitual lithæmia, "a minimum of albuminous food should be taken, in order to produce the least uric acid; and a minimum of carbonaceous food, in order to allow the uric acid to be oxidised as much as possible."* In obstinate cases, the patient may be advised to take his principal meal in the morning, when the digestive powers are strongest. The free use of diluents, such as soda and seltzer water, is also useful, as they help to eliminate from the system the morbid products of disintegration.

Still greater caution is necessary in all forms of lithæmia as to alcoholic stimulants. Malt liquors, port wine, champagne, and many other wines, ought to be strictly prohibited. Claret, or a small quantity of spirit largely diluted, as a rule, answers best; but even these should be taken sparingly, and many patients do best with no stimulants at all. This is not the occasion to discuss whether alcohol is necessary for the nutrition of the body in persons subjected to much mental or bodily toil, or whether, taking the masses in all walks of life, the standard of health would be better maintained by teetotal habits, or by a moderate use of alcohol. What I desire now to insist upon is, that alcoholic drinks in quantities usually regarded as compatible with, if not conducive to, health, and far short of what are necessary to affect the brain, in many persons undermine the foundations of health by deranging the liver; and that, to some individuals, even very small quantities are injurious. In persons who have been indulging largely, the risk of a sudden withdrawal of stimulants is less, I believe, than is commonly imagined. Unless there be evidence of a very weak heart, which itself may be the result of alcohol, the only unpleasant effects of sudden and complete abstinence, in my experience, have been sensations of sinking at the epigastrium and craving for alcohol, which a repetition of the stimulus has only temporarily relieved and has rendered more persistent.

2. *A free supply of oxygen.*—Next to careful regulation of diet, this is the most important object to be aimed at in the treatment of functional derangement of the liver, and especially in that which induces imperfect disintegration of albumen. An excess of fresh air, indeed, will often counteract the bad effects of too large a quantity of food. Although recent observations, more especially those of Parkes, have shown that the common impression that muscular exercise materially increases the elimination of nitrogen from the body is erroneous, there can be no doubt that exercise in the open air quickens the circulation of blood through the liver, in the manner already explained, and promotes oxidation, and that, by thus preventing the accumulation in the system of the imperfectly oxidised products of albumen, it operates beneficially in the treatment of functional derangement of the liver attended by lithæmia. The observations of Beneke and other authorities have shown that *sea air* is an oxidising agent of great power, and that nitrogenous and sulphur-holding tissues more rapidly disintegrate under its influence.† Accordingly, we find that many patients with hepatic derangement and lithæmia derive immense benefit from residence at the seaside and sea-bathing, although unfortunately the good effects of sea air are sometimes more than counterbalanced by unhealthy lodgings, or improper and badly-cooked food.

3. *Aperients; cholagogues.*—In a large number of cases of functional derangement of the liver, great advantage is derived from the frequent use of aperient medicines, whether there be a tendency to constipation or not. Aperients bring away not merely bile, but the products of disintegration contained in the fluid circulating between the liver and bowel prior to their further elaboration and elimination by the lungs and kidneys. Saline aperients, from the promptness of their action and the large quantity of watery exhalation from the bowel which they bring away, are among the best for the purpose now mentioned. Recourse is usually had to sulphate of magnesia (Epsom salt), the sulphate of soda (Glauber salt), or tartrate of potash and soda (Rochelle salt), or to various combinations of these salts with chloride of sodium, carbonate of soda, and other alkaline salts, such

* Lead is known to cause an accumulation of lithic acid in the system, but apparently by impeding its excretion by the kidneys, rather than by increasing its formation in the liver. (See Garrod, op. cit., p. 262.) Bence Jones, on the other hand, maintains that the accumulation of lithates in the system produced by lead, is to be ascribed to diminished oxidation. (Lecture on Pathology and Therapeutics, p. 289.)

* Op. cit., p. 142.
† Parkes On the Urine, 1860, pp. 115, 129.

as are found in the mineral waters of Carlsbad, Friederichshall, Püllna, Harrogate, or Cheltenham, or in the recently discovered Hungarian spring Hunjadi János. Daily experience shows the great benefit derived by patients with lithæmia from a course of one or other of these mineral springs, or from some artificial imitation of them, all of which are best taken with warm water, and in the morning fasting. All of these salts have little or no affinity for animal textures, so that they excite few changes in them; they cause very little irritation of the mucous membrane of the bowel and do not excite peristalsis, so that they purge without producing griping or pain. They act apparently by preventing the reabsorption of the fluid which is constantly being exhaled from the bloodvessels into the bowel.

There are certain other aperients which have long enjoyed a great reputation for promoting the secretion and discharge of bile and otherwise acting beneficially in derangements of the liver, and which have accordingly been designated *cholagogues*. Among these remedies, *mercury* and its preparations hold a pre-eminent place. At the present day, mercury has lost much of its former reputation as a cholagogue and alterative, and there is much difference of opinion as to its power over the liver. The practical physician gives a dose of calomel, finds the quantity of bile in the motions greatly increased and his patient's state much improved; and he argues that the liver has been stimulated by the mercury to an increased secretion of bile, and that to this cause his patient's improvement must be ascribed. The physiologist, on the other hand, ties the common bile-duct in one of the lower animals, produces a fistulous opening into the gall-bladder, and then finds that calomel has no effect on, if it do not diminish, the amount of bile that drains away through the fistula. It may interest some who are present if I refer briefly to the principal of these experiments.

Kölliker and Müller, in 1855, tried the effects of calomel upon the secretion of bile in a dog with a biliary fistula. The results were somewhat contradictory. Once the bile seemed to be increased, and twice it seemed to be diminished, by the administration of calomel.*

Of four experiments made in 1858 on a dog with a biliary fistula, Dr. George Scott found that, in all, the administration of large doses of calomel was followed by a diminution of fluid bile and of bile-solids.†

In the same year (1858) Dr. Mosler made similar experiments upon two dogs with biliary fistulæ. The administration of calomel was not followed by any increase of bile, nor could mercury be detected in the biliary secretion.‡

Ten years later (1868) a committee of the British Medical Association, with Professor Hughes Bennett of Edinburgh as chairman, made a number of similar experiments on dogs, and came to the conclusion that "mercury did not increase the flow of bile, but rather diminished it." §

The most recent experiments are those of Dr. Röhrig of Kreuznach, made in the Pathological Institute of Vienna. He found that, although large doses of calomel did seem to increase somewhat the secretion of bile, its power to do so was inferior to that of croton oil, colocynth, jalap, aloes, rhubarb, senna, and sulphate of magnesia, the cholagogue power of these drugs diminishing very much in the order in which they have been now enumerated, and calomel standing at the bottom of the scale.‖

These results of experiments upon the lower animals have added greatly to the discredit previously thrown upon mercury by its failure, when brought to the test of accurate clinical observation, to absorb plastic lymph in most forms of inflammation; and some eminent physicians are even of opinion that mercury and its preparations ought to be erased from our Pharmacopœia.¶ On the other hand, it has been fairly objected that the results of experiments with mercury upon dogs do not warrant conclusions as to its effects upon man; and, even granting that in man mercury does not increase the quantity of bile secreted by the liver in health, it does not follow that in disease there may not be some condition adverse to the formation of bile, which mercury may have the power of removing. Much, however, of the difference of opinion between the physiologist and the practical physician may be reconciled by keeping in mind the osmotic circulation, to which I referred in my first lecture, as constantly going on between the intestinal contents and the blood. A large part of the bile secreted by the liver and thrown into the bowel is constantly being reabsorbed, to reach the liver again; and accordingly, when the common bile-duct is tied, and a fistulous opening into the gall-bladder established, the quantity of bile which escapes from the fistulous opening immediately after the operation is much greater than at any time subsequently (Schiff). Mercury and allied purgatives produce bilious stools by irritating the upper part of the bowel, and sweeping on the bile before there is time for its reabsorption. The fact of mercury standing at the bottom of the scale of cholagogues in Röhrig's experiments is accounted for by its surpassing other cholagogues in this property, for of course the larger the quantity of bile that is swept down the bowel the less is reabsorbed, and the less escapes from a biliary fistula. That mercury does act especially upon the duodenum is proved, not merely by the large flow of bile which follows its action, but by the fact discovered by Radziejewski, that leucin and tyrosin, which are products of pancreatic digestion, under ordinary circumstances decomposed in the bowel, appear in the fæces after the administration of mercurials. It would appear, then, that mercury, by increasing the elimination of bile, and lessening the amount of bile and of other products of disintegrated albumen circulating with it in the portal blood, is, after all, a true cholagogue, relieving a loaded liver far more effectually than if it acted merely by stimulating the liver to increased secretion, as was formerly believed, and as some authorities still maintain; for in this case it might be expected to increase, instead of diminish, hepatic congestion. It is not impossible also that the irritation of the duodenum by calomel and other purgatives may be reflected to the gall-bladder, and cause it to contract and discharge its contents, and thus account in part for the increased quantity of bile in the stools.

There are also, I believe, grounds for believing that, apart from its increasing the discharge of bile from the bowel, mercury exerts a beneficial action in many functional derangements of the liver, in whatever way this is to be explained. Patients of the greatest intelligence suffering from hepatic disorders constantly declare that they derive benefit from occasional or repeated doses of mercurials which no other medicine or treatment of any sort confers; and the scepticism of the most doubting physicians would, I believe, be removed, should he unfortunately find it necessary to test the truth of their statements in his own person. It is not impossible that the good effects of mercury on the liver, and in some forms of inflammation, may be due to its property of promoting disintegration. Mercury appears to have the power of rendering effused fibrin less cohesive, and so more easily removed by absorption, than it otherwise would be.* Modern physicians of high standing, and little likely to be accused of credulity as to the beneficial action of drugs, have thought that mercury is useful in croup, by causing a degradation and disintegration of the plastic membrane. If this be so, it seems not improbable that mercury, which from experiments† we know to reach the liver, may under certain circumstances act beneficially by promoting, or in some way influencing, the disintegration of albumen. The remarkable effect of mercury on constitutional syphilis probably admits of a similar explanation. But in whatever way it is to be explained, the clinical proofs of the efficacy of mercury in certain derangements of the liver are to my mind overwhelming. I say so the more advisedly because I was taught to regard mercury as a remedy worse than useless, not only in hepatic diseases, but in syphilis; it cannot, therefore, be said that the convictions forced upon me by experience are the result of preconceived opinions.

Podophyllin is a remedy which seems to act in a very similar manner to mercury. Dr. Anstie's experiments with it on dogs and cats show that it has a special affinity for the small intestines, and especially for the duodenum. So far as my experience goes, it is less certain in its action, and even in moderate doses more likely to cause griping

* Wurzburg Verhandlungen, Bd. v. 1855, s. 231.
† Beale's Archives of Medicine, 1858, vol. i., p. 309.
‡ Virchow's Archiv, 1858, Bd. xiii., s. 29.
§ Brit. Med. Journ., 1868, vol. ii., pp. 78, 176, 191.
‖ Stricker's Jahrbuch, 1873, part ii.
¶ See Bennett, Brit. Med. Journal, 1868, vol. ii., p. 176.

* Bence Jones, op. cit., p. 283.
† Authenrieth and Zeller found mercury in the bile of animals treated with mercurial frictions. (Budd, op. cit., p. 67.)

and mucous stools, than the preparations of mercury. It is a good substitute, however, for mercury when, from any cause, this is contraindicated.

Colocynth, aloes, rhubarb, senna, and *jalap*, are also useful aperients in functional derangements of the liver resulting in lithæmia, constipation, or deficient excretion of bile. The experiments of Röhrig seem to show that they actually increase the amount of bile secreted by the liver. *Colchicum* also is a useful adjunct to other aperients in cases of liver derangement with lithæmia. According to Dr. Garrod, it "may often be given with advantage to gouty subjects as a cholagogue in lieu of the preparations of mercury,"* which, I may add, are often contraindicated in chronic gout with renal disease.

With these remedies we may include *taraxacum*, which has long been thought to exercise a specific action upon the liver, but which probably acts mainly as a mild aperient. When there is a tendency to constipation, it may be advantageously combined with either alkalies or mineral acids.

4. *Alkalies.*—Next to aperients, alkalies are the most useful drugs in the treatment of functional derangements of the liver. In lithæmia and in many of the symptoms which spring from this morbid state, the greatest benefit is often derived from a course of alkalies—such as the alkaline salts of potash, soda, or lithia, or some of the alkaline mineral waters, such as those of Vals, Vichy, or Ems. The comparative worth of the different alkalies for neutralising acids varies considerably. One grain of carbonate of lithia or of carbonate of ammonia is nearly equal to a grain and a half of carbonate of soda, or two grains of carbonate of potash. The beneficial effects of alkalies in derangements of the liver are not due to their neutralising acidity, or to any direct action upon lithic acid. It is, in fact, in the form of lithate of soda that lithic acid is met with in gouty persons. Alkalies seem to do good by combating the pathological state on which the formation of lithic acid depends. They are believed to promote oxidation, and thus increase the disintegration of albumen. Dr. Bence Jones tells us that in the body, as well as out of it, alkalies furnish the most marked evidence of assisting in oxidising action.† The experiments of Parkes with liquor potassæ seemed to show that it had the power of increasing the disintegration of the sulphur-holding materials of the body. The effect of its administration was to increase the amount of sulphuric acid and also of urea in the urine; although, with characteristic caution, Parkes adds that the increase of urea as the result of the potash was rendered probable, rather than proved, by his experiments.‡ From experiments on dogs with biliary fistulæ, Nasse was led to the conclusion that carbonate of soda taken with the food diminished greatly the secretion of bile;§ and a similar result has been observed by Röhrig to follow the introduction of the same salt into the intestines or the veins. The diminution affected the solids as well as the water of the bile, and especially the biliary salts. Nasse also found that after taking two drachms of carbonate of soda, the urine (human) was very rich in hippuric acid. The only inference at present to be drawn from these experiments is, that alkalies exert a powerful influence over the chemical changes going on in the liver. When alkalies are employed in lithæmia, it is well to suspend their use occasionally, as they are apt, when long continued, to derange the gastric digestion; but in cases where they are strongly indicated they are better tolerated than is usually thought. In the fifth volume of the Medico-Chirurgical Transactions, Dr. Bostock has recorded the case of a young lady who for months took carbonate of soda to the amount of two ounces and a half daily. The appetite and strength were much improved, and her blood, instead of being thin, coagulated firmly, the coagulum being strongly buffed and cupped.

5. *Chlorine, iodine, and bromine* are closely related in their chemical properties, and are believed to promote oxidation in the body by taking hydrogen from water and liberating oxygen. An aqueous solution of chlorine is of service in certain cases of lithæmia associated with general debility; and we know that the various salts of chlorine enter largely into the composition of the mineral waters which are most useful in hepatic derangements. Bromide of potassium will reduce certain enlargements of the liver and spleen, and may be given with advantage in cases of lithæmia associated with congestion of the liver and want of sleep. But among the remedies of this class the chloride of ammonium holds a pre-eminent place. It has obtained a great and well-deserved reputation in India and other tropical countries for the treatment of hepatic congestion, and I have found it of great service in the functional derangement of the liver attended by lithæmia. Given in scruple doses three times a day, it acts as a diaphoretic and diuretic, and exercises a powerful influence in relieving the portal circulation. It is not oxidised, but passes out of the system unchanged in the urine. According to Böcker's experiments,* it increases the nitrogenous solids of the urine. The mean daily increase of urea under its use he found to be not less than seventy-four grains—a quantity indicating a vast augmentation either of metamorphosis or of elimination, but, from its beneficial effect on the liver, most probably of the former. Chloride of ammonium has this advantage, that it may be combined with either alkalies or mineral acids.

6. *Mineral acids* are employed by many physicians in the treatment of functional derangements of the liver. Nitric acid especially has long been thought to have the power of augmenting the flow of bile; but there is no good evidence of this, either clinical or experimental. According to my experience, the action of mineral acids upon the liver is much less direct than that of alkalies. In all morbid states of the liver attended by congestion, and in most cases of lithæmia, I have found that they either did no good or they aggravated the symptoms. They may, however, be of service when there is debility and want of tone; but the chief good which they effect is probably that of improving the gastric digestion. In some cases, both acids and alkalies may be given advantageously—the alkalies before, and the acids after, a meal.

7. *Tonics.*—Clinical experience shows that, notwithstanding the existence of debility and anæmia, tonic remedies are apt to disagree in many cases of functional derangement of the liver. This remark applies especially to the functional derangement resulting in lithæmia. I have repeatedly known patients in this state improve at once on substituting for quinine iron, the mineral acids and stimulants, abstinence from alcohol, with aperients, blue pill, and alkalies, and careful regulation of diet; the strength, flesh, and colour returning under what at first sight might have appeared a lowering treatment. Different opinions have been expressed with regard to the utility of iron in chronic gout. According to Dr. Bence Jones, iron is one of the two potent remedies we possess for indirectly promoting oxidation in gout as well as in other maladies;† whereas, in Dr. Garrod's opinion, the preparations of iron are very likely, when indiscriminately given to gouty subjects, to excite a paroxysm of the disease, and for the most part are contraindicated.‡ My experience coincides with that of Dr. Garrod; and in simple lithæmia I have constantly known iron to increase the tendency to deposits of lithates in the urine, constipate the bowels, and aggravate any symptoms from which the patient may have previously suffered. As a rule, also, I have found that patients with chronic gout or with lithæmia do not tolerate even small doses of quinine. From some careful experiments made by Dr. Ranke, of Munich, quinine appears to have the power of diminishing the amount of lithic acid in the urine.§ The experiments were made on three persons, and the results were uniform. The effect continued for about two days after a single dose of twenty grains; and there was no evidence of any increased excretion after the effect of the quinine had passed off, so that probably the quinine acted by lessening the formation of lithic acid in the liver, or by substituting some other substance for it. From these experiments it might be inferred that quinine and bark should be of essential service in chronic gout and in lithæmia, but this inference is opposed to clinical experience.‖

When tonics are given in lithæmia, gentian, chiretta, cascarilla, and serpentaria are preferable to quinine and other preparations of bark. The best preparations of iron are the reduced iron, the citrate of iron, or the tartrate of

* Op. cit., p. 410. † Op. cit., p. 280.
‡ On the Urine, 1860, p. 151.
§ Archiv für Wissensch. Heilkunde, 1864, Band vi., p. 503.

* Parkes, op. cit., p. 165. † Op. cit., p. 143 and 279.
‡ Op. cit., p. 453. § Parkes, op. cit., p. 167.
‖ Ranke's experiments have been repeated by Dr. Garrod, who found that quinine did not materially influence the excretion of lithic acid.—Garrod, op. cit., p. 451.

iron and potash; these preparations are sometimes advantageously combined with alkalies and saline aperients. In cases of lithæmia attended by great nervous prostration, I have seen advantage follow the use of phosphorus in doses of one-thirtieth of a grain three times a day. The lithates have disappeared from the urine, and all the symptoms have improved. In some of these cases the circumstances seemed to leave no doubt that the improvement was due to the phosphorus.

8. *Opium* and its preparations are contraindicated in most functional derangements of the liver, and particularly when there is evidence of lithæmia. Opium impedes elimination both by the bowels and kidneys, and also appears to check the disintegrative processes which go on in the liver. It is generally believed to diminish the amount of bile secreted by the liver; and this view is favoured by the light-coloured stools which often follow its use. The result, however, of Röhrig's experiments on animals with biliary fistulæ was to show that opium increased the secretion of bile instead of diminishing it, so that probably the discharge of bile from the liver is only temporarily suspended by a similar influence on the coats of the bile-ducts to that which opium exerts on the coats of the bowel. Be this as it may, there can be no doubt that opium constipates the bowels, favours portal congestion, and checks the elimination, not only of bile, but of the products of disintegration which go on in the liver.* The experiments of Böcker and clinical experience alike show that opium impedes the elimination of the nitrogenous solids of the urine, and that dangerous and even fatal consequences ensue from its employment in structural diseases of the kidneys. These considerations explain why, in hepatic derangement attended by lithæmia, opium is contraindicated for the relief of pain, sleeplessness, or other symptoms for which it is commonly prescribed.

On the other hand, in the functional derangement of the liver which exists in diabetes opium is tolerated in large doses, and is often of signal service in checking the formation of sugar.† Its good effect is probably in great measure due to some influence on the vaso-motor nerves of the hepatic vessels, a reflex paralysis of which we have found to be one of the causes of diabetes.

In bringing these lectures to a close, I beg to tender to you, Mr. President, and to the Censors' Board, my thanks for the honour you have done me in appointing me to deliver them. I am very sensible of their manifold imperfections, and in apology can only plead a multiplicity of other engagements during the brief period allotted to their preparation. I am well satisfied, however, as to the great importance of the subject which I have brought before your notice, and that it is one worthy of more attention from the fellows and members of this College, and from the profession generally, than it has yet received. The day, I believe, will come, when, with a more perfect knowledge than we now possess of the healthy functions and of the signs of functional derangement of the liver, we shall be enabled to prevent, or to arrest at their commencement, many of the most serious ailments to which mankind is liable, and thereby to add another chapter to the volume of preventive medicine.

* Parkes, op. cit., p. 167.

† This is no new discovery. Sixty years ago, Sir Benjamin Brodie communicated to the Royal Medical and Chirurgical Society a case of diabetes treated with opium. Twenty-four grains of opium were taken in the day, with the effect of reducing the urine from twenty-five to seven pints, but without any of the usual effects of opium.—Medico-Chirurgical Transactions, vol. v., p. 236.

Another instance of conflicting professional testimony between analysts occurred recently at the Sittingbourne Petty Sessions. A grocer was summoned for selling butter which, according to the analysis of Mr. Meymott Tidy, contained 21·5 per cent. of water, and a large proportion of fats foreign to butter. It appeared, during the progress of the case, that a sample of butter out of the same firkin as that examined by Mr. Tidy was submitted to Mr. Wanklyn, who pronounced it to be unadulterated. Such a difference of opinion is positively startling. One expert alleges that a pound of the butter contained nearly four ounces of water, and the other guarantees the product to be genuine. The Bench ordered that the butter should be reanalysed; but who is to decide when chemical experts perform analyses with such widely varying results?

Clinical Lecture
ON A
CASE OF OBSTRUCTIVE MITRAL DISEASE.

Delivered at St. Thomas's Hospital,

BY THOMAS B. PEACOCK, M.D., F.R.C.P.,
SENIOR PHYSICIAN TO THE HOSPITAL.

GENTLEMEN,—It is one of the disadvantages of practice in London, both public and private, that chronic diseases are rarely under the observation of the same medical man throughout their whole course, and thus a large number of fragmentary cases are collected, of the ultimate result of which we never obtain any information. This difficulty especially occurs in some forms of heart disease, of which our knowledge both of the diagnosis and of the relative viability of the sufferer is in consequence less complete and exact than it might otherwise be. Thus, if we were to judge by the signs which are usually regarded as characteristic of mitral obstruction, that form of disease is one of the most common occurrence, yet we comparatively seldom have the opportunity of confirming such diagnosis, for the cases do not usually prove fatal till a long time has elapsed, when the valves have become incompetent, and when, consequently, the signs of regurgitation have arisen, and have materially modified those which were due to the state of obstruction. Sometimes it happens quite accidentally that we hear the results of cases which had been discharged from the hospital. Some time ago I had under my care a delicate woman who laboured under slight rheumatic fever, and in whom a presystolic murmur, obviously of old date, was heard. She recovered from the rheumatic symptoms, and left the hospital; but subsequently got worse, and became a patient of the Brighton Infirmary, under the late Dr. Ormerod, where she died. Dr. Ormerod, who had applied to me to give him information of the case, informed me that the form of disease was, as had been supposed, one of very aggravated mitral obstruction. The case which I propose to make the subject of this lecture is one in which the patient was twice under my care in the hospital—the first time, about eighteen months ago, when he remained about three months; he was again admitted in March last, and died soon after; and on each occasion the physical signs were carefully observed and recorded. The particulars are as follow.

J. H. B——, aged twenty-nine, a clerk residing in Camberwell, was admitted into Charity ward on the 12th of December, 1872, suffering from a third attack of rheumatic fever. He states that his father is living, but his mother died of disease of the heart at sixty-four. Of their family of ten all are living with the exception of one, who died young. The first attack of rheumatism occurred when he was fourteen years of age, and he was then laid by, more or less, for eight months. After that he got well, except that he continued to suffer a little from palpitation and shortness of breath. Four years after he had a second attack of rheumatism, and was ill for four months; but he again recovered, and was well till the occurrence of his present illness in May last. At the commencement of this attack he had pain in the ankles and wrists, and was confined to bed for three weeks, after which he was able to get about but not to return to business. At present the rheumatic symptoms are slight. He has pains in the left wrist and in the joints of the thumb; the feet also are swollen and the right ankle considerably so, but they are not tender. The face is pale, but sallow; the tongue is clean; the pulse small and regular, 80; respiration 28; skin cool; temperature 98·2°. The præcordial dulness on percussion commences above at the fourth interspace, and extends laterally from the middle of the sternum to near the line of the nipple. The apex of the heart can be felt to pulsate in the fifth interspace, somewhat within the line of the nipple. At the

base both sounds of the heart, but especially the first, are harsh, and between the nipple and the lower end of the sternum there is a loud, rough murmur, which terminates abruptly with a kind of flapping sound, apparently the systole of the ventricle. This murmur is heard also at the apex and towards the left axilla, but decreases rapidly in intensity, and is very indistinctly audible at the lower angle of the scapula posteriorly. There is a slight thrill conveyed to the hand placed over the region of the heart. He was directed to take some bitter infusion with bicarbonate of soda, and to have a blister applied to the præcordia.

Jan. 28th, 1873.—He is much better than he was at the time of his admission into the hospital. He has had some slight rheumatic pains in different parts of the body, more particularly in the right ankle, and the mixture first prescribed has in consequence been replaced by iodide of potassium, bicarbonate of potash, and small doses of colchicum. Since taking this the rheumatic pains have been relieved, and the swelling of the ankle has subsided. The heart symptoms continue much as before. The murmur is heard most loudly between the nipple and the lower end of the sternum, and thence towards the point of pulsation of the apex, but it diminishes in intensity towards the axilla, and is scarcely audible posteriorly. At the base both the first and second sounds are flat, but are not attended by any murmur. The apex beats in the fifth interspace near the line of the nipple, and there is a slight thrill felt by the hand placed over the seat of pulsation. The pulse is quiet, small, and feeble. He has some dyspnœa and palpitation, but does not suffer materially from heart symptoms.

He was discharged on the 14th of March much relieved, the report recorded being slight subacute rheumatism, with old obstructive disease of the mitral valves.

On the 16th of March, 1874, he was readmitted, and on the 20th the following notes were taken:—It appears that though he has been nearly free from rheumatism, he has never been well since he was last in the hospital, having suffered from shortness of breath, increased on exertion, cough, and occasional sickness; and though he had similar symptoms before, they became much aggravated after his last attack. He has not been able to do any work since he was discharged. He has had œdema of the lower extremities during the last fortnight, and his breathing is now so much embarrassed that he is incapable of lying down with any comfort; but he has no pain in the region of the heart, and does not suffer from palpitation. He has, however, a troublesome cough and a copious frothy expectoration. His face is pallid but not puffy; the abdomen is tumid, but the distension is chiefly flatulent; the œdema of the lower extremities extends as high as the knees, and there is some effusion in the right pleural cavity; the cardiac dulness on percussion commences above at the third interspace, and becomes entire at the fourth; laterally it extends from about the middle of the sternum to near the line of the nipple. The pulse is very feeble, somewhat irregular, and occasionally intermittent. The heart's action is irregular; at the base there is a slight roughness of the first sound, with a somewhat ringing second sound; in advancing towards the apex, a short rough murmur becomes audible, which attains its maximum of intensity below the nipple at about the seat of pulsation of the apex and to the left of that point. It has very distinctly the character of a presystolic murmur, being rough, short, and terminating abruptly. It becomes much less intense towards the axilla, and is scarcely audible posteriorly. The apex of the heart beats in the fifth interspace about an inch and a half below, and slightly within the line of the nipple, and on placing the hand over the corresponding space, there is a gurgling feeling or purring tremor to be felt, which, however, is so slight as to be entirely destroyed by even very feeble pressure. The hepatic dulness is enlarged in the thorax, and the edge of the liver can be felt to be somewhat hard, and the organ extends some distance into the abdomen. There is a decided icteroid tinging of the conjunctivæ and of the complexion generally. He passes a pint and a half of urine; it has a specific gravity of 1025, and is very much loaded with lithates, but does not contain albumen.

He was directed to have mild mercurial aperients and diuretics, but after his admission his condition did not improve; dropsical symptoms increased, the œdema of the lower extremities becoming greater, and the abdomen being decidedly more tumid and yielding distinct fluctuation. His cough was more troublesome, and the sputum was at first slightly but afterwards more deeply tinged with blood, and became very viscid. He had severe dyspnœa, and the dulness on percussion in the dorsal regions increased, and on the left side there was considerable sub-crepitation and increased cough and vocal resonance, with some pleural friction. He died on April 3rd.

The post-mortem examination took place the following day. There was general œdema of the integuments, with considerable effusion, containing some flakes of lymph, in the pleural cavities, especially the right. Both lungs were compressed and contained masses of pulmonary apoplexy of recent date. The bronchial mucous membrane was vascular, and the tubes contained mucus. The liver was somewhat large and firm, and displayed the usual nutmeg appearance. The spleen also was large and firm. The kidneys were of moderate size, and the capsules somewhat adherent, and the surface minutely granular and pale. The brain and its membranes were healthy. The heart was of large size, and weighed 19 oz. There was some fat on its surface, and several large white patches on the right ventricle, and the aorta and pulmonary artery were somewhat adherent. The right ventricle and auricle were considerably dilated, and the walls of the ventricle were of unusual thickness and very firm. The orifice and trunk of the pulmonary artery were large. The left auricle was extremely large, the lining membrane very thick and opaque, and the muscular structure firm and considerably hypertrophied, so that it measured fully from 1½ to 2 Paris lines in thickness. The left auriculo-ventricular aperture was reduced to a mere slit, 6 Paris lines in length, with very rough edges, and the folds of the valves were greatly thickened and indurated, containing plates of bone, so that it was impossible to separate the edges of the opening for more than a line or two. The left ventricle was not materially enlarged, and its walls were of natural width, and the muscular structure loose in texture. The aortic orifice also was small, and the valves much thickened; but they were not incompetent, fairly sustaining a column of water poured into the vessel.

The results of post-mortem examination in this case entirely correspond with the symptoms which had been observed during life. The disease, it will be seen, affected both sets of valves, but was much the most extensive in the mitral valve. Indeed, though the aortic orifice was small in capacity, the diminution was probably only a secondary effect of the very great constriction of the auriculo-ventricular aperture. The aortic valves were, however, also considerably thickened, and this condition sufficiently explains the roughness of the first sound of the heart which had been noticed. There was also a loud ringing second sound heard at the base, and this must have been produced by the powerful reaction on the pulmonic valves consequent on the increased size of that vessel. The alteration in the dimensions of the two orifices was very obvious on measurement. The pulmonic aperture admitted a ball having a circumference of 42 Paris lines, the average size being only 40·3; while the aortic aperture had a circumference of 33 Paris lines, the average capacity being 35·6.

The most important disease was, however, found in the mitral valve. The curtains were very greatly thickened and indurated, and their angles were adherent together, so that the opening was reduced to a mere slit six Paris lines in length, and the edges of which were much roughened, and were only capable of being separated a line or two, so that the impediment to the transmission of the blood through the opening must have been extreme. Indeed, I do not recollect to have ever seen so great a degree of constriction in the heart of a person of similar age. The left auricle was also very much enlarged, and its walls thickened, the muscular structure having an average width of 1·5 to 2 lines, while the lining membrane was also very thick and opaque. It is evident that this condition very fully explains the murmur which had been heard during life. The murmur had, it will be remembered, its point of greatest intensity between the nipple and the lower end of the sternum; it was peculiarly rough; it terminated suddenly with the commencement of the ventricular systole; it also rapidly decreased in loudness on advancing to the left from the apex, and was almost inaudible behind. It had therefore all the characters of a murmur due to ob-

struction to the flow of blood from the auricle into the ventricle. The presence of a thrill or purring tremor is confirmatory of this view, though the thrill was so slight that it could only be felt when the hand was placed lightly in contact with the surface, and was entirely destroyed, as I have known in other cases, by the slightest pressure. The paleness of the patient, the smallness and feebleness of the pulse, and the absence of serious pulmonary or other visceral complication, at least till quite the advanced stage of the disease, is equally in accordance with the conclusion which had been arrived at—that the case was one of mitral obstruction.

It is scarcely necessary for me to recapitulate what I have so often dwelt upon, but I may remark that had the case been one of regurgitation through the mitral orifice, whether occurring alone or in combination with some degree of contraction, the signs and symptoms would have been entirely different. The murmur would have been heard with the systole, it would have had a blowing character, it would have died gradually away, and it would have been loudly audible to the left of the point of pulsation of the apex, and have been quite distinct behind. The face would have been flushed and the lips and hands purple, and the pulse would probably also have much more quickly become irregular in force and frequency, and there would have been earlier and more decided evidence of pulmonary and other visceral and general congestion, indicated by bronchitis, blood-spitting, enlargement of the liver, dropsy, &c. If also the orifice were not contracted there would be an entire absence of thrill or purring tremor. The extent of dulness on percussion in the præcordial region indicated the large size of the heart, and the form of the dull space showed that the organ was rather increased in width than in length. The alteration in the form of the heart was thus such as attends mitral rather than aortic disease. It will be observed also that the enlargement chiefly affected the left auricle and the right cavities, the left ventricle being but little larger, and its walls scarcely thicker, and not at all firmer, than natural, while the hypertrophy and dilatation of the right ventricle were very marked. The weight of the heart (nineteen ounces) was very considerably increased, if we take the average for the age and size of the patient at about ten to eleven ounces; but it was by no means so great as often occurs in cases of aortic valvular or aortic disease when the left ventricle also is involved in the change.

The only other remarks which seem to be called for have reference to the probable cause of the disease and its duration. It has been supposed that contraction of the mitral orifice in some cases originates during intra-uterine life, either as the result of imperfect development or of disease; and I think that this may not very unfrequently be true. In such cases, however, the symptoms would probably be noticed more or less from the birth of the child, or from early infancy. In the present instance there is no reason to suppose that the patient was not a healthy person in early life, and the valvular disease was apparently due to the attack of rheumatism which he had when fourteen years of age, and since which he had occasionally had some symptoms of cardiac defect. This supposition is in accordance with the fact that both sets of valves were affected, and we know that when rheumatic endocarditis occurs it is, for obvious reasons, very apt to affect both sets of valves, not equally, but to a greater or less extent. I find that of twenty-three cases of combined disease of the two sets of valves which I have examined after death, nine were of rheumatic origin, or, if we deduct three cases in which the aortic valves were malformed, nearly half of the cases of combined disease originated in rheumatism. If this view be correct, the disease must have very slowly progressed, though it probably may have been aggravated during the later attacks of rheumatism, and the symptoms only became marked within the last two years of his life. I have elsewhere expressed the opinion that mitral obstruction is a less immediately dangerous form of disease than mitral regurgitation, and I am so firmly convinced of this that I do not hesitate to give a more encouraging prognosis in cases of that form of disease than when the valves are incompetent. In both forms of disease, however, the symptoms may from time to time become aggravated and again subside, so that under favourable circumstances life may be in some cases prolonged for years.

CASE OF EPILEPSY PRESENTING FEATURES OF UNUSUAL INTEREST;

WITH COMMENTS.

BY JOHN W. OGLE, M.D.,
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THE following case of epilepsy offers several points worthy of notice. It is of interest as showing how peripheral impressions may excite spasmodic attacks in this affection; and especially as showing how irritation of particular parts of the surface may, at will, be made to determine the epileptic seizure, thus reminding one (as alluded to later on) of those experiments on animals in which, after lesion of portions of the nervous system, spasmodic or epileptic attacks could be induced by irritating determinate portions of the integument. I will proceed to relate the circumstances of the case, and subsequently will offer such comments as naturally arise from their consideration.

Alfred R——, aged twenty-one, a cabinet-maker's assistant, unmarried, was admitted into the hospital on the 10th of July of the past year, suffering from epileptic attacks, to which he had been liable since he was fifteen years old, at intervals sometimes of a year, but in general of only about a month. It appears also that he had similar attacks when he was eight or ten years of age, which were supposed to have originated in fright. The patient's mother had been consumptive, but he had himself never shown symptoms of this disease, and his thoracic and abdominal organs appeared to be healthy. He had greatly indulged in sexual excess, and a few years previously had had syphilis. He had not been a drunkard. It was not known that he had ever had intestinal worms. For nine months before admission the attacks had been more frequent, and chiefly occurred during the day, and for about two weeks as many as twenty had occurred during the twenty-four hours. A year or two before admission he had a blow on the head, which appeared greatly to aggravate the attacks. The seizures lasted about three or four minutes, and during their existence the patient did not entirely lose consciousness, though he was unable to resist them. In the attacks the left side of the body was chiefly affected. There was no want of power or of sensibility in any part of the body, and the pupils were equal, acting tolerably, but not very much, to the influence of light. The patient took bromide of potassium, under which he appeared to become more conscious during the attacks, which, however, were not decreased in number by its use. He afterwards became an out-patient, still taking the bromide, but again, on the 1st of October, became an in-patient, at which time the "fits" were about ten per day in number. He had a knowledge of their approach by a sensation as of blood rushing up from the *left* side of the chest and left arm to the head, and they were generally accompanied by severe pains in the left axilla and the *left* side of the body. The muscles of the left side of the body generally were mostly affected, and those of the left side of the face were violently drawn, with a quivering motion, to the left side, the face becoming dark-red in colour. The muscles of the limbs, though convulsed, were not very rigid, unless when extension was attempted, and then they became very much so. It appeared that if the patient knocked himself on the left side in any way, an attack was liable to be excited, and it was soon apparent that any bystander could at will bring on an attack by suddenly jerking the left arm, or roughly handling the left shoulder, or severely pinching the skin of these parts. This was so much the case that on several occasions I induced the attacks in the manner above described, in the presence of my clinical class, and in this way furnished them with the best possible opportunity of studying the details and order of phenomena in such an attack. In order that an attack should be induced a second time, it was necessary that an hour or two should have elapsed after the first one, as if to permit of an accumulation of force. The patient observed that very often the slightest touch, as of a fly, on parts of the surface of the left arm or side of the neck, would bring on an attack.

On the second admission into the hospital, under my care, after an absence of some time, the patient's aspect was noticed as very dull and stupid. There was a slight want of expression in the *left* side of the face, and the pupil of the *left* eye was always more *dilated* than its fellow, though the sight was considered to be good. There was no strabismus. The pupils acted but sluggishly. No changes in the condition of the eye were found by the ophthalmoscope. The special senses and muscular power were unaffected, and the sensibility of the skin was everywhere natural, but the uvula was deflected to the right. No albumen or sugar was found in the urine. The patient was treated by bromide of potassium, increased to twenty-five-grain doses three times a day, and was occasionally purged. After ten days the attacks appeared to be less frequent and less strong; but the bromide was discontinued, owing to the large crop of eruptions on the skin produced by its use. The patient was then placed under the influence of belladonna, twenty drops of the tincture, increased to thirty drops, being given three times a day. This was continued for twelve days, when, owing to sore-throat and inflammation of the palate and uvula with dysphagia, it was given up, under the impression that the drug was the cause of the above ailments. It appeared, however, that decidedly good results had followed the use of the belladonna, as the fits became fewer in the nights, and often absent in the day; and on the eighteenth day after it was first begun the patient's account was that he could bear the left arm to be struck without any fit occurring. He was still suffering from slight irritation, with redness of the throat and some dysphagia. Of late the patient has resumed the belladonna in more moderate doses, and altogether is much freer from the pains and sensations about the left arm, axilla, and side of the body, and also from the convulsive attacks. As a rule, he notices that one occurs just before going to bed at night. Latterly he has been much troubled by the sensations on the surface of his left arm and side, which rush up to the head, and cause what he calls an "all-overishness," but do not result in any fit. He often compares the sensations to those produced by galvanising the surface. There is no redness or any notable alteration of appearance of the skin at any part. The surface of the left side and shoulder &c. was galvanised, but no attack was thereby produced.

Comments.—In the first place I would observe that I have considered the case just described as one of veritable epilepsy, although the patient's consciousness was but slightly interfered with. Many would, doubtless, term the convulsions "epileptiform," as contradistinguished from "epileptic" proper, by reason of the absence of complete unconsciousness. The distinction between epileptic attacks involving loss of consciousness, and so-termed epileptiform seizures, in which the mental powers are but little or not at all affected, would appear to be one of degree; and possibly depends, not so much on any difference in the nature of the affection as on the fact whether certain of the cerebral vessels are affected or not, recognising, as we are compelled to do by the present state of our knowledge, that spasm or contraction of the minute vessels of the cerebral convolutions forms one of the momenta or factors of the seizure in, at any rate, one variety of typical epilepsy.*

I would draw attention to the general nature of the attacks, the convulsive action being so much confined to the *left* side of the body—the same side from which arose what is often termed the "aura"; and especially to the fact that, by irritation of the peripheral parts on the same side of the body, the attacks could be produced. But especially would I draw attention to the fact that the convulsive seizures could artificially, and at will, be brought about by peripheral irritation.

Although generally it was necessary, for a repetition of the attack, that a certain interval of time should occur, as if, indeed, a period were requisite to allow of "recharging" or "accumulation" of force, the appearances of the patient during the attacks, the manner in which the muscles of the *left* side of the face and the *left* limbs were affected, the head being, as it were, screwed down to the left shoulder during their occurrence, reminded one forcibly of the condition of those animals in which, after injury of the spinal cord, epileptic or epileptiform attacks could be produced by irritation of the surface in certain parts—a condition which Dr. Brown-Séquard had produced in guinea-pigs,* and which some years ago I obtained after the manner adopted by him, and which has also lately been obtained by Professor Westphal, of Berlin. In my patient, however, there was no screaming, as happens for the most part in the case of the animals during an attack.†

It is of course pretty generally acknowledged that in many cases of epilepsy, in addition to a given condition of the central parts, some irritation of, or impression upon, the peripheral or distant portions of the nervous system is necessary for the production of the attacks, and I might quote numbers of cases and references to authors illustrative of this. Especially interesting are those cases in which foreign bodies, insects, &c., in the ear or frontal sinuses, nose, &c., have produced convulsive attacks.‡ But it is comparatively seldom that epileptic attacks in man can be demonstrated as being capable of production by irritation of the nerves spread over the *surface of the body*, or cicatrices, or wounds. I have notes, however, of one or two cases in which, after injury to cranial bones, pressure and irritation of the scar on the scalp has caused convulsive attacks, and a few cases are quoted§ by Dr. Brown-Séquard, in his "Researches on Epilepsy," 1857, pp. 24, 25, 31, of the production of epileptic attacks by pressure on certain parts of the surface. The author also speaks of cases in which fits were caused by galvanising parts of the skin, but such are comparatively rare. Not very long ago a case illustrating the same, to which my attention was drawn by Dr. Jones, occurred at St. George's Hospital. It was that of a little girl, seven years and a half old, who was under Dr. Barclay's care in January, 1868, and whose history was as follows:—She was one of several children, all in good health, as were her father and mother. She was well made, but had always been irritable and fretful, and had for some time been subject to "fits" and great nervous irritability. She did not learn to talk till she was seven years of age. She was liable to uncontrollable fits of laughter, which went on until she fell down, and to these falling fits she was liable whenever startled by noise or sudden shock. She was said to be worse in cold weather. The peculiarity of the case was this—viz., that whenever anyone touched her sharply on the back she dropped down in a fit, generally with a little cry, recovering in about two or three seconds. On the whole the girl remained much the same whilst in the hospital, and after a short time was removed from observation.

I will here quote a remarkable case from THE LANCET of 1867‖ having kindred features to the above. It was that of a boy, under the care of Mr. Holden, who had a fatty tumour over the upper part of the right scapula. Whenever the tumour was handled, however lightly, the patient became apparently unconscious, and his body assumed the position of intense opisthotonos, and this position lasted for about half a minute, or longer if pressure was continued. So stiff were the muscles during this time that the boy could be lifted from the bed by one of his arms, and the body still retained its rigid position. Recovery took place after a succession of deep sighs. Occasionally it was not the tumour but the spine which, being touched, initiated the phenomena. The train of symptoms could be brought on during sleep. When under the influence of chloroform they could not be produced, but as its effects wore off, and before volition had returned, the spasms took place on the tumour being touched. The case is related at length by Mr. Holden in the St. Bartholomew's Hospital Reports for 1867.

I may here mention a case which I recently saw with Sir G. Burrows, in which a fit of epilepsy with unconsciousness was produced by sudden pressure on the surface of several parts of the thorax and the spine. In this case there was marked tenderness of one or two of the dorsal vertebræ.

* I say *one variety*, inasmuch as, though most probably more stress was formerly laid on congestion and fulness of bloodvessels in the brain as a cause of epilepsy, there is danger now of running into the opposite extreme, and ignoring that condition as a possible cause, and of attributing the affection too exclusively to emptiness of the vessels.

* See note A in postscript.

† The scream which ordinarily attends the commencement of an epileptic seizure in man is not a necessary attendant certainly. I have known of several instances proving this statement.

‡ Thus, in the Gaz. des Hôpitaux, 1861, p. 123, is a case related by Rabé of epileptiform attacks and hemiplegia caused by an insect in the external auditory meatus; and Brown-Séquard, in his work on Epilepsy, p. 47, quotes the case of hystero-epilepsy due to larvæ in the frontal sinuses published by Dumeuil and Dussaule in the Annuaire des Sciences Méd., 1856.

§ From Bravais, Fernel, Rondelet, Tulpius, E. H. Clarke, &c.

‖ See vol. ii., p. 127.

The following case, mentioned by Dr. Bristowe in the Croonian Lectures for 1872,* though not strictly analogous to the preceding cases, may fitly be quoted as exemplifying the same. It was that of a boy, aged fourteen, who had had fits for two years, and was brought into St. Thomas's Hospital insensible, after having had a great number of "fits" night and day for a week. On recovering it was found that his legs were in a state of locomotor ataxy, and that whenever he attempted to move them a feeling of tingling, starting from the toes, was succeeded by a loud distressing scream, which ushered in an epileptic attack of about half a minute's duration. This sequence was quite constant. During the day, by keeping quiet, he managed pretty well to avoid any fit, but when asleep and his legs not under voluntary control the attacks were frequent. In this case it is possible that it was not the irritation of the surface but rather the muscular action which started the "fits," and if so the case would be analogous to those in which convulsive attacks can be induced by sudden jerking or extension of muscles.† Of such a nature was a case of Mr. De Morgan's related in THE LANCET for 1867,‡ in which severe spasmodic contraction of cervical muscles was produced by movements of the back or walking.

The subject will receive illustration from certain cases of the puerperal condition in which convulsive action is set up by the accoucheur. Thus at a meeting of the medical section of the British Medical Association the late Sir J. Simpson (as related to me by Dr. A. Farre) recorded the case of a lady who was suffering from puerperal convulsions, and it was noticed that the slightest peripheral irritation, such as a fly alighting upon the face, was sufficient to call forth fresh convulsions. Dr. Farre has also told me of two cases, in both of which an attack of puerperal convulsions was brought on by the accoucheur passing his hand into the uterus, after the labour was over, for the purpose of removing an adherent placenta. In both instances the patient, as soon as the practitioner's hand had entered the os uteri, was seized with a convulsion in which she expired. In neither instance was it known that convulsions had ever occurred previously.

I would here allude to certain physiological researches which may be quoted as bearing on the subject of the production of spasm or convulsion by means of impressions made on the skin—viz., the experiments of Dr. Weir Mitchell, in which he demonstrated the production of reflex spasms and paralysis by the application of cold (produced by rhigolene§ to definite regions of the skin.‖ In these experiments it appeared that the chilling of the skin, as also the application of deep cold to the spinal region beneath the skin, produced remarkable reflex spasms, as well as consequent stupor, which was apparently epileptiform in character, and conspicuously resembling the epilepsy induced by the artificial anæmia resulting from ligature of the arteries of the neck.¶

* See Brit. Med. Jour. for April 20th, 1872, p. 414.

† Compare with these cases those others with rotatory or circular movements of the body or head in which the attacks can be anticipated by twisting the body or head in opposite directions. I have notes of a case of a boy suffering from epilepsy who, at the onset of the seizure, can often succeed in preventing a fit by turning violently in a direction opposite to that to which he inclines, and taking firmly hold of anything within reach.

‡ Vol. ii., p. 128.

§ Rhigolene, as I am informed by Dr. B. W. Richardson, is crude amyl hydride, obtained naturally in America from oil springs, but formed by distillation of petroleum oils. It is named by Richardson "hydramyle," and is used by him for general and local anæsthesia (chiefly the latter). It forms half with pure ether of the fluid called anæsthetic ether used for spray.

‖ See American Journal of the Medical Sciences, 1868, vol. lv., p. 25.

¶ The author, in describing his experiments, notices their resemblance to the convulsions of epilepsy which may be set up by pinching or galvanising the skin.

(To be concluded.)

TEST FOR DIGITALIS.—Bronner states that the best test for digitalis is Pettenkofer's reaction with the biliary acids. The smallest trace of digitalis dissolved in water may be detected by the addition, in the first place, of a watery solution of dried bile and then of sulphuric acid. On warming the fluid to about 160° F., it assumed a peculiar red tint. If the addition of the sulphuric acid be so made that it does not mix with the solution, a red zone appears, which gradually spreads through the whole mass.—*Pharmaceut. Zeitung*, 1873.

CLINICAL ESSAYS.

BY T. PRIDGIN TEALE, M.A.,
SURGEON TO THE GENERAL INFIRMARY AT LEEDS.

No. IV.—ON OVARIOTOMY "IN EXTREMIS."*

DURING the last twelve months it has occurred to me to perform ovariotomy three times on patients apparently at the point of death. The first case, in which acute suppuration of the cyst with peritonitis resulted from tapping (THE LANCET, June 28th, 1873), and the third, have recovered. The second, after rallying for a few days, died on the sixth day after the operation.

The experience of these cases, and of a few others of a like kind which have been reported, is extremely encouraging, and teaches us that in conditions apparently hopeless the surgeon can hardly be justified in refusing a patient the chance afforded by ovariotomy, provided that the danger results from conditions affecting the tumour or peritoneum, and not from disease of heart or lungs or of any other vital organ. Had this principle been established in the early days of ovariotomy, it is likely that lives might have been saved in some instances where simple tapping has proved fatal.

CASE 2.—Elizabeth T——, aged twenty-six, a patient of Mr. Loe, was delivered of a still-born child July 12th, 1873, having up to that time enjoyed good health. After her confinement her body continued large, and then began to increase until her breathing became seriously impeded.

Sept. 2nd.—She was tapped by Mr. Loe, and sixteen pints of viscid fluid were drawn off, but the cyst could not be emptied in consequence of the large flakes of lymph which blocked the canula. As the tumour quickly refilled, I admitted her into the hospital in order that she might undergo ovariotomy.

29th.—She was to-day admitted into the infirmary, but as arrangements could not immediately be made for an operation, she was allowed to return home for a few days.

Oct. 6th.—Her condition had rapidly become worse from great and sudden increase of body, and intense pain; so that Mr. Loe requested me to see her in the middle of the night. She was incessantly vomiting, the abdominal walls were tense, her pulse was feeble, and her extremities were cold. She was immediately tapped, and twenty-four pints of fluid were withdrawn, the body remaining half full from, as was supposed, a second untapped cyst existing. She was temporarily relieved by this tapping, and then became more feeble. Thirty-six hours after the tapping her condition became extremely critical, and she seemed almost on the point of sinking. I therefore decided at once to perform ovariotomy in her cottage, as she was too feeble to be removed to the hospital.

Operation, Oct. 8th.—On making the usual incision it was found that the peritoneal cavity was filled with ovarian fluid which had escaped from the ruptured ovarian cyst, that the peritoneum was acutely inflamed, and that the sac was adherent, in front to the abdominal wall, and behind to the viscera. With some difficulty the sac was detached and removed, the pedicle was seared, and the peritoneal cavity was emptied with extreme care of all the fluid and of all the clots of blood and lymph which it contained.

For three or four days the patient rallied and gained strength, and her pulse came down from 150 to 120. On the fifth day symptoms of fresh peritonitis set in, with excessive vomiting; and on the sixth evening she died.

CASE 3.—Annie Q—— was admitted into the Leeds Infirmary on Oct. 17th, 1873, for the purpose of undergoing ovariotomy. Early in July, 1873, she had been confined of her first child. Nothing of moment occurred at the time; but at the end of three weeks the abdomen began to enlarge, and continued to do so until she was tapped by Mr. Clarke, of Morley, a month before admission, several pints of pus being withdrawn. After the tapping her condition improved, so that for a short time she could resume her household duties. Improvement did not last long. The

* Read before the Leeds and West Riding Medico-Chirurgical Society, Jan. 2nd, 1874.

abdomen rapidly refilled, and her condition became very critical.

Oct. 17th.—She was admitted into the infirmary much exhausted by her journey from Gildersome, anæmic and anxious-looking, her pulse being 125, very feeble, her voice hardly audible, her legs œdematous, and the urine albuminous. On examination it was found that the abdomen was much distended, that the skin of the abdomen was œdematous, and that at a point below the umbilicus there was a patch of inflamed skin as if pus were on the point of making its way to the surface. Fluctuation could be detected over the whole of the abdomen, except the flanks and epigastric region. There was resonance over the front part of the tumour for the space of about four inches square. The rest of the abdomen was dull except at the flanks.

18th. — The following day her condition had become much worse; her pulse was 150, her respiration hurried; and her state was such that I did not deem it right to defer ovariotomy even twelve hours. I therefore called a consultation with my colleagues at eight o'clock in the evening. After carefully weighing the question whether the case were suppurating ovarian cyst or circumscribed perimetric or peritoneal abscess, we decided that in either case it would be right to operate.

Operation. — An incision having been made in the abdominal wall below the umbilicus, the cyst was reached and punctured, and a large quantity of pus was let out. The cyst was found to be very firmly and universally adherent to the abdominal wall in front and to the intestines behind. As rapidly and as carefully as I could, I stripped the cyst from the abdominal wall and intestines and uterus, and had separated all but a small portion the size of the hand, when the exhaustion of the patient became so great that she seemed to be dying; we therefore deemed it safer to leave the remaining part of the sac *in situ* than to risk the additional loss of blood that would be involved by its separation. There was considerable hæmorrhage during the separation of the cyst, especially from the abdominal wall. No pedicle could be discovered. The clots having been sponged out with the greatest care, the wound was closed almost as a matter of form, so great and hopeless seemed her exhaustion.

For an hour after the operation her pulse was imperceptible, but returned after slight vomiting. She remained in a very critical state till the next evening, when she began to rally, and she recovered without any serious drawback, being removed into the general ward on Nov. 1st, the fourteenth day. At the end of a week, when the stitches were removed, some fetid pus and gas escaped from the abdominal cavity; and even now, from time to time, she has similar discharges from the wound, but is gaining strength and able to attend as an out-patient.

March, 1874.—She is strong, stout, and no longer anæmic; the discharge from the wound continues, but in smaller quantity.

Remarks.—1. It is an interesting question what the nature of the cyst was. If ovarian, where was the pedicle, and how came it that suppuration took place in such a recent ovarian cyst? If circumscribed abscess, how came it that in the short space of three months such a thick-walled, perfect cyst should have formed, capable of being stripped entire from the abdominal walls, intestines, and uterus? 2. The experience afforded by these cases, and especially by No. 2, suggests the question for serious consideration, whether, when a patient *after* ovariotomy is evidently on the point of sinking from peritonitis, it might not be justifiable to open up the wound, sponge out all purulent secretion and decomposing blood, and so place the patient in a similar position to one who, with a peritoneum acutely inflamed from rupture or suppuration of an ovarian cyst, has undergone ovariotomy. 3. Does not the experience of ovariotomy in general, and of cases such as I have related in particular, suggest a hope that we may some day deal with the almost hopeless cases of perforating ulcer of the bowel by opening the peritoneal cavity, washing out the irritating material, and stitching up the bowel at the seat of perforation?

Leeds.

Scarlet fever, measles, and whooping-cough are still prevalent in Manchester. Cases of typhus and enteric fevers and diphtheria also continue to be reported.

PRACTICAL NOTES ON CUTANEOUS SUBJECTS.

BY TILBURY FOX, M.D. LOND., F.R.C.P.,
PHYSICIAN TO THE DEPARTMENT FOR SKIN DISEASES IN UNIVERSITY COLLEGE HOSPITAL.

VIII.—SCABIES IN PRIVATE PRACTICE.

It is important to remark that scabies often differs very much in aspect, according as it occurs in hospital or in private practice. Amongst the poor, and especially the uncleanly, the burrowings of the acari in the skin are attended with the formation of papules, vesicles, pustules, wheals, &c., in abundance. But amongst the well-to-do, and particularly those who observe great cleanliness, the ordinary results of the irritation produced by the acari may be almost, if not entirely, absent. So that if a student were to be guided by the ordinary descriptions given in books of scabies, he would certainly not be able to diagnose the scabies present. The disease would not answer in description to papular, pustular, or vesicular scabies, and yet true scabies might be present. I have seen several cases lately in which patients complained of itching intensified at night in different parts of the body, and in whose skin nothing could be detected but a few cuniculi about the hands, or the penis, and an apology for a vesicle here and there. I have seen a multitude of acarian furrows about the hands and other parts in a case of scabies, and nothing else. In other cases I have observed just a few very fine, delicate, pale, flesh-coloured papules, the result of irritation set up by acari present in the skin, and nothing more; and these, which were lichenous papules, were difficult to make out. In all cases in which a patient complains of itching aggravated at night, even though there be none of the ordinary evidences of scabies present, yet a diligent and active search for cuniculi should be made about the hands and penis. I have known patients treated with powerful internal remedies for "prurigo," lichen, and the like for weeks, whilst scabies, which existed, was wholly unsuspected because there were no papules and pustules present. Papules, pustules, and vesicles are indeed accidental accompaniments of scabies, which should be looked upon as consisting essentially of the acari in their furrows (cuniculi)—i.e., the real scabies, and the phenomena of irritation (papules, pustules, &c.) superadded, which, under certain circumstances, may be entirely absent.

SCABIES OF THE PENIS.

Two or three cases of scabies limited to the penis have recently come under my notice. In all of the cases careful search detected cuniculi. In two, suppurating buboes were produced by the irritation, and the disease was thought to be syphilitic. The diagnosis was rendered easy by the absence of any decided induration about the scabies spots, their vesico-pustular origin, pruritus intensified at night, the presence of cuniculi, and the absence of any concomitant evidence of syphilis.

A Mirror OF HOSPITAL PRACTICE,

BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. IV. Proœmium.

LONDON HOSPITAL.

ON A CASE OF RECOVERY FROM HEMIPLEGIA.

(Under the care of Dr. HUGHLINGS JACKSON.)

In speaking recently of a case of probable embolic hemiplegia, Dr. Hughlings Jackson made some valuable remarks with respect to the treatment of this class of cases. He endeavoured to show, and we think successfully, that in cases of hemiplegia due to the plugging of an artery from syphilitic disease of the vessel, we have not merely to

treat syphilis. The symptoms are due to the presence of a clot in the bloodvessel, which, although induced by the diseased state of the vessel, is not a specific lesion—that is, it is not a syphilitic deposit, and will not therefore be particularly influenced by antisyphilitic remedies.

The case which led to these remarks was that of a woman thirty years of age, who said she had never had rheumatic fever, and who had not been recently confined, but who had a loud presystolic murmur. She was brought in for hemiplegia of the right side of two days' standing. The paralysis of the limbs was not perfect; she could move the arm a little, but could not use it; the leg, however, was so much paralysed that she could not stand; the facial paralysis was insignificant. There was no defect of speech of any consequence, nor of articulation or voice. With rest and careful diet she rapidly got quite well, and went out about three weeks after the onset of the seizure. No drugs were given.

Very careful notes of her case were taken by Mr. Williamson, but the above summary will suffice. From her age, and from the presence of valvular disease of the heart, the diagnosis of plugging of some branch of the left middle cerebral artery was warranted. At any rate, there must have been some local lesion. Dr. Hughlings Jackson believes that that local lesion or part of it exists still, or rather that the part of the motor tract destroyed is still wanting. He does not conclude in such a case (assuming the correctness of the diagnosis of arterial plugging) that recovery follows because circulation is re-established by collateral anastomosis; according to Cohnheim the cerebral arteries are "terminal arteries." Nor does he think that recovery follows because the plug is absorbed; arterial plugs *are* absorbed, but is there proof that they are absorbed soon enough to prevent permanent local softening? He believes that recovery is to be explained on the Principle of Compensation. The structure of a nervous organ is, he believes, such that each part of it represents slightly (although each part in some special manner) what the whole organ represents in greater degree. For example, Dr. Hughlings Jackson thinks that each part of the corpus striatum represents the face, arm, and leg—that, so to speak, the corpus striatum is a mass of little corpora striata. When a small part of the organ is destroyed, the undamaged remainder "takes on" the duty of the part destroyed. But be the explanation what it may, it is quite certain that recovery from hemiplegia will occur when a considerable part of the corpus striatum has been *permanently destroyed*—as subsequent autopsy shows. The fact that recovery from symptoms produced by destruction of part of a nervous organ will follow, notwithstanding that the part destroyed is not restored, Dr. Hughlings Jackson has long ago submitted to the criticism of those who object to his views on the pathology of chorea on the ground that recovery from chorea would not occur so fully and so quickly if the local changes were owing to embolism. His reply to the objection is that patients *do* recover from embolism, even when so grave as to produce hemiplegia, and that, too, notwithstanding that there remains softening of part of the motor tract. Such cases bear also on our judgment as to the effects of drugs. To take the most striking illustration. If a young patient who is manifestly the subject of syphilis becomes quickly hemiplegic, without convulsion and without loss of consciousness, the diagnosis of plugging of a syphilitic artery is warrantable. Now the local softening which this plugging leads to, and on which the hemiplegia depends, is *not a syphilitic* change. All that antisyphilitic treatment could do would be to reverse the syphilitic changes in the arterial tube. If it did so rapidly, it would have done nothing for the hemiplegia, for the artery would remain blocked, and the nervous organ it supplied would continue in starvation. Iodide of potassium is no more likely to do good for the variety of "syphilitic hemiplegia" under remark than for hemiplegia the result of arterial blocking caused in other ways. As will have been seen, it is not denied that recovery follows antisyphilitic treatment in such cases; all that is disputed is the conclusion that recovery results from such treatment. Of course iodide of potassium should be given; we should treat syphilis whenever we find it. Moreover, it is rare to find syphilitic changes limited to one small part of the encephalon.

UNIVERSITY COLLEGE HOSPITAL.

STRICTURE OF URETHRA; PERINEAL FISTULÆ; CATHETERISM AND CONTINUOUS DILATATION; ACUTE SYNOVITIS; ASPIRATION; RECOVERY.

(Under the care of Mr. HEATH.)

THE following case, for the notes of which we are indebted to Mr. Godlee, surgical registrar, shows not only the importance of perseverance in the treatment of even the tightest strictures, but illustrates some of the dangers to be apprehended after manipulations or operations on the urethra. Whether the rigors, the pyrexia, and the articular effusions and swellings which sometimes supervene on affections of, or on operations on, the urethral canal be due to septicæmic influences or merely the result of excentric irritation is a disputed question. It would appear that either or both causes may be at work in some instances. For example, rigors, even of a severe nature, may sometimes follow the introduction of a catheter into a healthy urethra, and in some instances so-called urethral fever may show itself. What the actual pathological conditions which induce these changes are is not known. But it is highly probable that, in some of the chronic cases in which ulcers form behind the seat of the stricture, the veins are opened by the necessarily irritating manipulations in passing a catheter, so that any septic matters which may have collected in the canal are readily absorbed, and give rise to a constitutional reaction resembling septicæmia or even pyæmia.

James A——, a labourer, aged fifty, was admitted on Dec. 19th, 1873, with a tight urethral stricture and perineal fistulæ. The stricture has existed twenty years. In September a swelling formed in the perineum, just behind the scrotum. The swelling increased in size, and became very hard. About the middle of November the swelling burst, and a large quantity of matter escaped. Shortly after this the patient noticed that some of the urine passed through the fistulæ which remained. Subsequently the quantity of water passing by this way became less, and sometimes all came through the urethra. There was also hypospadia, the orifice of the urethra opening just in front of the frænum; but the patient is married and has children.

On admission two irregular transverse fissures were found at the junction of the scrotum and the perineum. A probe could be passed about one-third of an inch into these fistulæ, and when the patient micturated, a few drops of urine oozed through. The perineum was œdematous. A hard mass, about the size of the testicle, could be traced into the urethra from the front of the scrotum. The urine was very turbid, contained a trace of albumen, and was neutral in reaction. A very tight stricture was detected at about four inches and a half from the orifice of the urethra. No catheter could be passed, and the stream was very small.

Dec. 24th.—The patient being put under the influence of chloroform, an incision was made into the perineum, and an attempt made to pass a catheter through the stricture, but without success. Six hours after the operation the patient had a rigor, and next morning he had two more rigors.

29th.—Less water passes per fistulam, sometimes none at all for a whole day.

Jan. 2nd.—The patient's health is good; temperature normal. Scarcely any water passes through perineum. An incision was made with a curved bistoury into a lump on the left side of the perineum, but nothing escaped but bloody serum.

3rd.—Patient improved in general health.

9th.—To-day the patient came under the care of Mr. Heath, who succeeded in passing No. 2 silver catheter into the urethra; but, although the whole length of the catheter was in the urethra, no urine escaped even after three quarters of an hour.

10th.—Mr. Heath passed a director from one of the fistulæ into the bladder, and then a gum-elastic catheter along that. Urine immediately escaped. Then, by manœuvring, a No. 1 silver catheter was got into the bladder down the urethra.

12th.—The left knee-joint was painful and swollen, and contained fluid. Catheter still tied in. Temperature 100·4°.

13th.—The synovial pouches of the left knee-joint appear to be distended. Temperature 99·6°. Patient feels very ill. Ordered ten drops of tincture of opium and twenty drops of spirits of nitrous ether. Mr. Heath removed the catheter, which had been left in three days. After this patient was better, but was still hot and feverish. Temperature 100·4°. Knee-joint very painful.

15th.—Knee-joint less painful, and patient is better. All the urine appears to pass by urethra. Urine is sticky and full of pus and mucus. Temperature 101·2°. The left knee-joint is hot, tense, and swollen, and the veins passing over it are engorged. A fine trocar needle of the aspirator was passed into the pouches above the knee, but no fluid escaped.

16th.—Swelling in knee less. Temperature 99·4°.

17th.—Swelling still less. Temperature 98·4°. No urine passes per fistulam. A few drops of straw-coloured serum were taken from knee-joint by means of the aspirator.

20th.—Patient looks very ill, but the knee is smaller, has lost its redness, and there is no pain on manipulation. Temperature 102°. A No. 1 catheter was passed with tolerable ease, then a No. 3 was got into the bladder and left there for an hour. Temperature 101·4°. Has had no rigors since the 14th.

22nd.—Patient is better, and can move his knee-joint freely, although there is yet a good deal of swelling.

24th.—No. 4 catheter passed without difficulty, and was left in two hours. Temperature normal.

26th.—No. 4 passed again; a larger catheter could not be got into the bladder. Temperature normal. Knee smaller.

28th.—Mr. Heath passed a No. 5 with ease, then No. 6 and No. 7.

29th.—Nos. 7, 8, and 9 passed with ease. An ounce and a half of fluid from the knee-joint, but unfortunately the characters of the fluid were marked by the presence of blood. The knee was strapped.

31st.—Temperature 100°. Patient better than yesterday. No. 10 passed.

Feb. 3rd.—No. 10 passed; the patient's stream is notably increased; swelling of knee-joint less.

5th.—The swelling in the perineum has, during the course of treatment, gradually reduced in size, and is now hardly perceptible; knee is free from pain, and is smaller.

8th.—Patient passes No. 8 catheter daily; the urine is almost clear.

20th.—Patient discharged. To use a No. 9 catheter.

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

EMPHYSEMA OCCURRING DURING LABOUR IN A CASE OF CONTRACTED "FLAT" PELVIS.

THE following case, for the notes of which we are indebted to Mr. Grigg, is worthy of record from the comparative rarity of the accident, and also as showing the mechanism of labour in the "flat" pelvis.

Ellen C——, single, aged twenty-three, a primipara, was admitted on the evening of the 10th of December last, in labour. The "waters" had broken some time previously, and the patient had had a severe shivering attack about the same time. Was delivered at 10.20 P.M. on the 11th of a female child weighing 9¼ lb. The first stage lasted forty hours, the second six hours. During the latter stage the pains were very strong, and the expulsive efforts extremely violent. The head, which was the presenting part, did not advance until the patient was placed on her hands and knees, after which the labour made rapid progress, and she was delivered in that position. The placenta came away in twenty minutes. Two hours afterwards there was flooding, which was with difficulty arrested. She experienced no difficulty in breathing, nor was she conscious that anything had happened to her chest during the labour. She stated that she had always had most excellent health, and, with the exception of small-pox, had had no illness of any kind; no cough; family healthy; parents living. Had fretted much whilst "carrying" the child, and during the last two months had vomited much.

Next day she complained of sore-throat, and on examination of the cervical region emphysematous crackling was discovered extending over the face and the front of the neck, but more on the right side. The face was puffed. No cough. Chest sounds normal.

On the 13th the emphysema had extended over the front of the chest, still keeping more to the right side. From the course and direction of the air, it appeared probable that the rupture of the air-cells had taken place in the right lung near its root; thence the air had escaped into the middle mediastinum, and ascended alongside of the trachea and the large vessels into the cellular tissue beneath the skin of the face, neck, and chest.

The sore-throat of which the patient complained was evidently dependent on the air diffused into the cellular tissue of the neighbourhood of the pharynx. The emphysematous crackling entirely disappeared in seven days. There was a considerable rise in temperature and in the frequency of the pulse during that period.

The child's head was remarkably flattened, and looked as if it had been compressed between two boards, the fore and back part of the head were so equally projecting; very slight caput succedaneum; the plane of the sagittal suture was nearly horizontal; on either side of the head, reaching behind the ears, were raised red marks, similar to the impressions made by the blades of the forceps—in fact, they might have been easily mistaken for such. Over the occipital protuberance was a swollen red patch, which afterwards sloughed. No force was used to the head during its passage through the pelvis or outlet. The two former marks were evidently made by the head pressing against the sacral promontory and the symphysis pubis, the latter against the arch of the pubes. The pelvis was examined carefully later on, when there was found considerable flattening of sacral promontory and the body of the pubes, with shortening of the conjugate diameter of the inlet. The course and direction of the marks on the side of the head exactly corresponded with the description given by Spiegelberg in his paper on the "Mechanism of Labour in the Common Forms of Contracted Pelvis." The head enters the inlet in the transverse diameter, and the sagittal suture runs in a transverse direction and very near to the posterior wall. The head makes two rotations, one on the occipito-frontal axis, and the other upon its transverse axis. In order to facilitate this action, the force (when the head has been partially moulded) should be downwards and backwards. If the woman is placed on her hands and knees, the uterus falls forwards and the axis of the body of the child would form an angle, looking anteriorly with the axis of the head in the brim; consequently the head would rotate on its occipito-frontal axis, the sagittal suture coming forwards.

ARDWICK AND ANCOATS HOSPITAL, MANCHESTER.

SIMULTANEOUS DISLOCATION OF BOTH SHOULDER-JOINTS.

(Under the care of Mr. G. E. LEGGE PEARSE.)

THE subjoined notes are of interest, not only as descriptive of the rare condition of simultaneous dislocation of both humeri, but also as showing the differences in the direction of the dislocations and in the effects of the attempts made for their reduction.

John T——, aged seventy-two, was admitted Feb. 23rd, complaining of an injury to both shoulders. It was at once apparent that both humeri were dislocated, but on making a careful examination, it was discovered that the left humerus was dislocated in the ordinary manner beneath the coracoid process, but on the right side the head of the humerus had been thrown backwards beneath the spine of the scapula. The head of the bone could be readily felt upon the dorsum of the scapula, the roundness of the shoulder was quite gone, the skin peculiarly tense on the anterior surface, and the elbow was only slightly separated from the side. The patient stated that fourteen hours before admission he was coming downstairs, holding a jug of water in his right hand. He slipped and fell, and in trying to save the jug, his right arm was doubled under his chest. On the left side the subcoracoid dislocation was easily reduced by the common method with the heel in the axilla. The same plan was then tried for the subspinous dislocation, but without success. On again examining the dislocation, slight pressure was made on the projecting

head of the humerus, the elbow being at the same time drawn backwards. In this manner, with hardly any force, the head of the humerus returned to the glenoid cavity with an audible snap. The patient, although over seventy years of age, has had no unfavourable symptom since the accident.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

TUESDAY, APRIL 14TH, 1874.

DR. C. J. B. WILLIAMS, F.R.S., PRESIDENT, IN THE CHAIR.

THE ETIOLOGY OF BRIGHT'S DISEASE AND THE PREALBUMINURIC STAGE.

BY F. A. MAHOMED,
RESIDENT MEDICAL OFFICER OF THE LONDON FEVER HOSPITAL.
(*Communicated by* W. H. BROADBENT, M.D.)

Two symptoms are described which indicate a condition of high tension in the arterial system—viz.: 1. Sphygmographic tracings, which possess the following characteristics: (*a*) considerable pressure required to extinguish the pulse; (*b*) prolongation and undue sustension of the tidal wave; (*c*) well-marked percussion; (*d*) small amount of dicrotism. 2. A blue reaction obtained with the guaiacum test for blood, if delicately applied, when no albumen or blood cells can be discovered by the microscope, spectroscope, or nitric-acid test. The mode of procedure, having previously tested reagents and paper employed, is as follows: (*a*) dip a slip of white blotting-paper in the urine to be examined; (*b*) evaporate the urine by drying the slip over a spirit-lamp; (*c*) add a drop or two of tincture of guaiacum, and allow time for evaporation; (*d*) add a drop or two of ozonic ether, and allow the paper to become thoroughly dry before the reaction is judged of.

It is then shown from cases of so-called "inflammatory Bright's disease," occurring during the convalescence from scarlatina, that the series of pathological events occur in the following order:—1. A poisoned condition of blood: by uric acid or other effete material—as in scarlatina, measles, erysipelas, pregnancy, or a severe chill. 2. Arrest of the action of one of the excretory organs. 3. Increase of tension in the arterial system. 4. Transudation of the crystalloids of the blood through the kidney. (These conditions constitute the prealbuminuric stage, and are easily remediable.) 5. Albuminuria; followed by dropsy and the usual symptoms of Bright's disease. 6. Changes in the kidney and other excretory organs—namely, intestinal tract and skin—produced by acute, and afterwards prolonged, congestion and high arterial tension—viz., (1) exudation and plugging of tubules or follicles; (2) fatty degeneration and absorption; (3) contraction.

Puerperal eclampsia and albuminuria are accounted for by the predisposing condition of high tension in the arterial system which exists during pregnancy. Poisons—such as gout, lead, or alcohol—produce a similar but less intense condition of increased arterial tension and excretory congestion; they also produce chronic changes, though of a different character, their onset being gradual, and not sudden. The first two changes of the acute condition—namely, exudation and plugging of tubules, followed by fatty degeneration and absorption—do not exist; they may, however, at any time be produced, and symptoms of the first stage then supervene. The name "inflammatory Bright's disease" is discussed: the changes are ascribed to "*congestion* under high pressure"; while a condition of inflammation is denied. The term "Bright's disease" is considered too indefinite. A suggestion is made that the terms "acute" and "chronic excretory congestion" are less erroneous than those in general use; while the amyloid and true fatty kidneys are always included in the forms of degeneration to which they each belong.

Dr. BROADBENT said he could bear witness to the facts brought forward in the paper, as he had seen the investigation. He regretted that the extent of the bluing could not be shown as well as the tracings. He had seen it daily, and it was a great proof of the accumulation of the *débris* in the blood. The paper was of interest physiologically and clinically: physiologically as showing the relation and cause of the high blood tension, which was secondary to capillary resistance and defensive; and clinically it showed the benefit from treating early threatening albuminuric complications. The prealbuminuric stage was detected, and removed either by purgation or the hot pack.

Dr. DICKINSON did not agree with the statement that other organs were affected before the kidney in albuminuria from scarlet fever; he thought the kidneys deserved the priority. As to the use of purgation in cases of scarlet fever and dropsy, he had seen many cases set in in which there had been no constipation. One point was difficult to him. Mr. Mahomed would put both forms of Bright's disease, the inflammatory and fatty, and the granular, under "excretory congestion." It was hard to class two opposite diseases under the same term. He agreed that the inflammatory condition from measles and scarlet fever was preceded by blood-poisoning, but the granular kidney depended upon other causes; it may be hereditary, and appear early. He knew three members of one family who died of the granular kidney, and there was no blood-poisoning there. It was often associated with fibroid change in the arteries.

Dr. BRUNTON said the paper drew attention to the resistance to the blood in Bright's disease, and the part it played in producing albuminuria. Albumen has been ascribed to the blood and the kidney. There is no proof that it depends upon a modification of the first, so we must look to the kidneys. Here there are two structures, the vessels and the epithelium lining the tubules. Disease of either produces albuminuria; by some it is said to be always due to the epithelium, but it is not so. So the resistance in the vessels is the cause, and change of pressure will bring on albuminuria. Increased high tension will not always do so, for there may be high tension elsewhere and low tension in the vessels of the kidney, because they contract, regulating the supply of the blood. The paper showed how to diagnose high tension before it reached a dangerous point, and so we were able to relieve it.

Dr. SIBSON said the paper was valuable for the facts it contained; we wanted facts without inferences. The paper showed that in scarlatina, before albuminuria set in, there was distinct arterial tension, recognised by the escape of crystalloids into the urine, and that by purging the arterial tension was lessened; but he did not think we could say that the purging prevented albuminuria. He did not think it well to group the granular kidney with the other forms, nor did he like to alter a nomenclature for the sake of an opinion. Why should the name of Bright's disease be given up?

Dr. MILNER FOTHERGILL said albuminuria was associated with high arterial tension, and alluded to Frerichs' experiments. He thought there was some alteration in the condition of the blood inducing this high tension. The arterial resistance being increased, the left ventricle was hypertrophied. He thought the high tension had something to do with the condition of kidney described.

The PRESIDENT said the subject was exceedingly interesting; in all cases of high tension before albumen was found in the urine, the crystalloid substances became apparent. He demurred to the extent of the importance given to high tension. In all cases of high tension the urine was scanty and high-coloured and altered before albumen appeared. The tense cord-like pulse and the reduplication of the first sound of the heart, in cases of albuminuria and diseases of the heart and kidney before the albumen was pronounced, had often led him to say it would occur. The reduplication depended upon the condition of the blood from retained excrementitious matter, which increased the arterial resistance throughout the system. After purging—salines and digitalis—the arterial resistance disappeared. Albumen often arose from congestion, but congestion must go on to altered structure before we have kidney disease. He thought albuminuria was more likely to arise from disease of the kidney than from altered tension of the blood.

Mr. MAHOMED said Dr. Dickinson and Dr. Sibson considered he confounded the large white kidney with the cirrhotic. He did not mean to do so, or to infer that the white passed into the cirrhotic. He believed the gouty contracted kidney began as such. He used the term excretory congestion as acute and chronic, putting the cirrhotic kidney into the chronic. The contracted kidney

was said to be hereditary, but it could not be born so; there must be some change in the blood producing blood-poisoning; the atheroma was the result of high tension. He had used the name excretory congestion because all the excretory organs, skin, &c., were affected. There was a distinction between albumen from venous congestion and arterial alteration; in venous albuminuria there was no guaiacum test, but in arterial albuminuria it was always present. With the assistance of Dr. Brunton, he had made the following experiment. A large dog was chloroformed and the urine tested; there was no guaiacum reaction. The aorta was then ligatured below the renal vessels; the next urine drawn gave the blue reaction, and was alkaline. In albuminuria from lead-poisoning, as the lead is removed the albumen disappears. The urine before albuminuria was always scanty, as far as he had observed.

Reviews and Notices of Books.

Diseases of the Urinary Organs, including Stricture of the Urethra, Affections of the Prostate, and Stone in the Bladder. By JOHN W. S. GOULEY, M.D., late Professor of Clinical Surgery and Genito-Urinary Diseases in the Medical Department of the University of the City of New York; Surgeon to Bellevue Hospital, &c. With 103 Wood Engravings. pp. 368. New York: W. Wood and Co. London: Trübner. 1873.

THE author of this work occupies, we believe, a high position in New York as an authority on genito-urinary disorders, and we are glad, therefore, to have the opportunity of comparing the views he entertains with those held on this side of the Atlantic. Dr. Gouley is evidently fully aware of all that is being done in regard to his special department both in this country and on the continent, and it is interesting to find that some of the conclusions he has arrived at are just the reverse of those which have of late been somewhat persistently urged upon the profession here. Thus Dr. Gouley emphatically lays down (p. 25) that gum-elastic catheters do *not* give less pain to the patient than metal instruments, and he himself always employs metal sounds for the *larger* sizes—i.e., above No. 7; and he says: "Patients, in taking note of the change of instrument, almost always speak of the slight pain they feel during the passage of the metallic, as compared with that produced by the gum instrument." Dr. Gouley also prefers the recumbent position for the patient upon whom a catheter is being passed.

Apropos of some recent teaching, we may quote the following (p. 43):—

"The surgical treatment is demanded in all the stages of stricture, and without it internal medication is of little avail. This already well-known fact is here stated because there are practitioners who still entertain the idea that if patients suffering from obstructed micturition due to stricture be at once put to bed, and treated medicinally, or even expectantly, they will soon get well. In answer to this, it may be said that when patients make a good recovery under such treatment, they have not been suffering from stricture, but probably from temporary obstruction in the deeper part of the urethra, caused by inflammatory swelling, which will frequently subside by rest alone. Those who believe that they cure *stricture* in this way do not usually resort to urethral exploration, without which no diagnosis can be accepted as conclusive."

In cases of tight stricture the author prefers slender probe-pointed whalebone bougies, over which he slides his own "tunneled sound" or an elastic catheter, thus following Mr. Wakley's practice. Treatment of stricture by caustics and electrolysis are condemned, but the author has a high opinion of "divulsion," or "splitting," as practised by Mr. Holt. On this subject Dr. Gouley says (page 61): "Extensive experience has taught the profession that nothing short of complete divulsion of the stricture will ensure success, and that, after all, it amounts to about the same thing as an internal urethrotomy; but it is a safer operation. Therefore Sir Henry Thompson's precept of *stretching* as much and *tearing* as little as possible might well be reversed; and I will venture to say, *tear* as much and *stretch* as little as possible, and the results will be all the better." Again, at page 83, the author says: "My own preference is now for divulsion, and I only resort to internal urethrotomy in intractable strictures of the ante-scrotal portion of the canal."

Both internal and external urethrotomy are recommended by Dr. Gouley in suitable cases, and he has contrived a special grooved and tunneled staff for the latter proceeding. He regards it as an error to retain a catheter after either operation. We need not, by the way, touch on the controversial correspondence between our author and Professors Van Buren and Bumstead in regard to tunneled urethral instruments.

In discussing the subject of Retention of Urine, the author refers to the old practice of treating retention due to inflammatory swelling of the urethra in the following terms (page 217): "In former times, patients suffering in this way were treated with opiates, hot baths, and leeches to the perineum, all of which are very good, but are certainly insufficient to relieve the present distress. Prompt and efficient succour is now given in these cases by the immediate use of the catheter, without any damage being done to the urethra, and is accomplished by the cautious introduction of a well-oiled No. 6 or 7 gum catheter." Somewhat energetic attempts have been made of late to revive the practice here condemned, but the published results are not such as to recommend it.

Affections of the prostate are very briefly treated; and so also is the subject of stone in the bladder. The only novelty is the last chapter, which is devoted to a description, largely illustrated, of the method of "perineal lithotrity" recommended by M. Dolbeau, of Paris. Dr. Gouley seems to have a strong preference for this method, which, however, can be but rarely required. It consists in opening the membranous urethra from the perineum, and then dilating the prostate and neck of the bladder with a special instrument; after which a strong forceps or lithoclast is introduced into the bladder, and the calculus broken into fragments sufficiently small to be readily extracted. Professor Dolbeau seems to have had thirty operations, with five deaths; and Dr. Gouley has had three successful cases. This practice would appear to be in direct opposition to the modern views respecting the non-dilatability of the neck of the bladder, and the necessity for free incisions through the prostate.

Practical Medicine, with a Sketch of Physiology and Therapeutics. By ALEXANDER SILVER, M.A., M.D. London: Henry Renshaw.

WHILE adopting the grouping of physiology, pathology, and therapeutics, Dr. Silver asks that his new work on the old basis of "Meade's Manual" may be judged as a book on Practice of Medicine.

As regards the part on Physiology, we need only point to the page (34) on Bodily Heat, to show what a narrow line divides condensation from confusion. The student who accepts the normal temperature as 100°, and believes that "by adding to the diet oily substances" and "by wearing warm clothing" he can in a healthy individual effect an increase of bodily heat, will find his physiological experiments somewhat at fault.

The part on Therapeutics, being but the epitome of an ordinary materia medica, will be an unwelcome substitute for the list of useful formulæ which are usually appended to handbooks on medicine.

Dr. Silver prides himself in his preface on having avoided the "conventional divisions into diagnosis, prognosis," &c.; but it is not clear that his readers are gainers thereby. Turning to the subject of phthisis, we find the opening sentence of what would have been called diagnosis to be—"two of the earliest signs of consumption are fever and emaciation;" "the fever which is described as hectic is peculiar." We should hope that the student will have learned elsewhere to diagnose phthisis before the establishment of Dr. Silver's "earliest signs." When considering the cough of phthisis it is said, "one troublesome feature connected with this cough is its tendency to end in vomiting, owing to the pressure of the stomach against the diaphragm"; but no explanation is given of the cause of this unprovoked encroachment by the stomach in this disease.

From the following very terse statements the student has to extract his knowledge of the moist sounds heard on auscultation. "In the first stage, as soon as bronchial catarrh begins, we have moist bubbling râles of various kinds. In the second stage most of the above intensified. But none of these indicate softening; what does so is a thin metallic bubbling, tending to become cavernous, &c." There is here an opportunity for very delicate discrimination between "moist bubbling râles of various kinds" and "thin metallic bubbling." Under the head of treatment, cod-liver oil, of course, holds the first place; and, from an author professing perspicuity and brevity, the following is extraordinary: "Unfortunately its use is not so well understood; *it is not the giving of cod-liver oil*, it is its digestion and absorption which is desirable." In pneumonia, although sweating is said to be "the most common critical phenomenon," yet it is laid down that "sweating which proves so beneficial in bronchitis is useless in pneumonia, and so are many remedies popularly believed to be efficacious."

Having vacillated between the terms "sunstroke" and "heatstroke," the author finally accepts both. "One we might well call sunstroke; in such the patient falls, gives one or two gasps, and dies," and is thus cavalierly disposed of. "The other, to which the term heatstroke is more applicable, comes on more gradually. *Heatstroke is essentially a condition of blood-poisoning where over-heated blood is the poison.*" Why this curious piece of sophistry should have been gratuitously introduced we are at a loss to divine.

To Dr. Silver's practice we are indebted for the information that "in some cases nothing does so much good as Epsom salts in full doses; in others this would speedily kill the patient."

The work appears to have been somewhat hastily compiled, and will hardly raise the author's reputation.

The Principles and Practice of Surgery. By WILLIAM PIRRIE, F.R.S.E., Professor of Surgery in the University of Aberdeen. Third Edition. Illustrated by 498 Wood Engravings. 8vo, pp. 977. London: J. and A. Churchill. 1873.

THE fact that a large work like the one before us has reached a third edition, is a sufficient guarantee that the author has not been neglected by surgical readers, and would, under ordinary circumstances, justify us in merely noticing some of the recent additions. But, as the author states in his preface, "the present, as compared with previous editions, may be considered a new work. More than nine-tenths of the last edition have been entirely rewritten." Under these circumstances we shall examine the work at greater length than otherwise we should have felt called upon to do. The author's position is far too good to stand in need of any indiscriminate praise. The number of works which are being constantly placed before the profession is so great, that both student and practitioner must often be at a loss to decide which to possess, or perhaps more correctly speaking, which *not* to possess. It must be confessed that, as far as general surgery is concerned, the student is perplexed rather than enlightened by the multiplicity of the sources of information; and, with the exception of fresh editions of the best standard works, he would probably be materially benefited by a strict prohibition against the publication of a new work for many years to come. We do not wish, however, to contest the *raison d'être* of Mr. Pirrie's book.

The best portions of the work are those in which practical surgery is dealt with, and these are undoubtedly well done. The illustrations are also very good, and many are original.

The author has evidently devoted much time to the study of the affections of the osseous system, considerably more than one-third of the work being devoted to diseases and injuries of this system, including of course the bones of the head and spine. The articles on the Fractures and Dislocations of the Femur are perhaps the best in the whole work, and are really good. But in some other matters the author has adopted too fine a degree of subdivision in his classification; as instances of which we may mention his description of various kinds of ulcers, and his "bilious erysipelas," which is so called because bilious derangements precede the inflammation of the skin.

In the more scientific departments of surgery and pathology the author does not show to so much advantage. Tuberculosis and struma are differentiated and yet combined in such a manner as to render the descriptions of them confusing. Lupus, again, is remarkably involved. Lupus non exedens is stated to be synonymous with serpiginous ulcer; and under the head of Lupus exedens rodent ulcer is described.

The work, moreover, in many places bears signs of hurried composition. For instance, the references to the writings of Drs. Williams, Addison, and Augustus Waller, in regard to migration of white blood-corpuscles in inflammation, are so confused that one is accredited with the publications of the other. Another small fault is, that the "proofs" have been carelessly read; for many names are incorrectly spelt in some places, but rightly in others. Further, in the article on Fracture of the Upper Jaw, which is so designated in small capitals, the author, without any note or explanation, describes fractures of the lower jaw and their treatment, neither of which are placed in the index.

The Domestic Management of Children. By P. M. BRAIDWOOD, M.D., Surgeon to the Wirral Hospital for Sick Children. London: Smith and Elder. 1874.

MATERNAL ignorance of the proper method of feeding, clothing, and managing children is the source of a large part of infant mortality and adult infirmity. Some of it is due to sheer neglect, but much is not. The mothers mean well, but do not know what to do, or how to do it. The medical man has to instruct them, and to dispel much foolish prejudice as well as ignorance. This reiterated instruction is very laborious, and often cannot be given efficiently by word of mouth. A work which should convey the needed information clearly and briefly, and yet in sufficient detail, would be a useful aid to the hard-worked practitioner. Dr. Braidwood's little book does this fairly well. In about eighty pages it contains chapters on the management of children immediately after birth, the feeding of children, other accessories to healthy development, and the management of children when sick. Extensive quotations from Dr. Combe make up a considerable part of the work; the rest appears useful and accurate in its information, though bearing some evidence of hasty composition. We miss some suggestions which we should have expected to find in it. In the account of suitable aperients so universal a

children's medicine as rhubarb should not have been passed over without some allusion. In the description of the symptoms of morbid states for which the mother is to be on the look out, there is no mention of the insidious early symptoms of rickets, which it is so important to recognise and treat. The division of the frænum of the tongue is spoken of as if it were an operation to be done by the mother, in whose hands it would certainly not be so totally devoid of danger as it is described. The whole work, small as it is, might be condensed into still smaller compass. The more briefly necessary information can be given the more likely it is to be remembered and acted upon. As it is, however, the book will be very useful, and deserves favour with both the profession and the public.

REPORT
OF
The Lancet Sanitary Commission
ON
THE DWELLINGS OF THE POOR.

No. I.

WE have for many months past had it in contemplation to issue a Commission to inquire into the condition of the dwellings of the working classes in the metropolis. The demands upon our space have of late been so unusually great that we have been most reluctantly compelled to postpone the discussion of this very important topic till the present time. We regret the delay for this reason, that the sufferings of the poor are necessarily much less in the summer than in the winter; and we should have preferred laying before our readers a picture of the condition of the poor at the most trying rather than at the least trying time of year, feeling that by so doing we should have had a better chance of helping to stir up the dormant energies of the nation to take some decisive steps—steps worthy of a great people and an enlightened age—for the complete abolition of a condition of things which in many parts of London is little better than that in which the criminal classes wallowed a century ago, and which then, by rousing the philanthropic spirit of Howard, brought about the reformation of the prison system in this and other countries.

We have reformed our prisons, and in a great measure we have reformed our workhouses. Latterly, Mr. Plimsoll has done, and is still doing, much for the amelioration of the condition of our sailors. Will nobody take upon himself the chivalrous task of battling with those "vested interests" and other obstacles which necessitate the continuation of a great and crying scandal?

More than one deputation has already waited upon the Home Secretary to impress upon him the necessity of the interference of Parliament in this matter, and perhaps it is not too much to hope that the present session may see the introduction of a Bill for giving power to building societies for the acquisition, destruction, and reconstruction of the houses in many parts of London. This power has been and is frequently and constantly given to railway companies. In March, 1865, the Earl of Shaftesbury stated in the House of Lords that the houses for the demolition of which notice had been given under the Bills before Parliament in that session amounted to 3500, containing a population of 20,000 persons. This wholesale destruction of house property has not, it is believed, been accompanied by any corresponding exertion in the direction of building, and, as a consequence, the late occupants of the destroyed houses have been compelled to adopt one of two courses—either to squeeze themselves into houses already overcrowded, or else take advantage of the workmen's trains, which are now tolerably common, and live out of London. In adopting the first course, they necessarily violate those rules of sanitation which we have long regarded as incontrovertible; by adopting the second course they not only subject themselves to a considerable increase in their daily work and daily risks, but it would appear in many instances they have, by removing into the suburbs, managed to fix their habitations in a sort of no man's land, where the most glaring breaches of hygiene and of sanitary Acts of Parliament are allowed, in a great measure, to go unchecked.

Before commencing to deal with our subject in detail, it would be advisable probably to give some slight sketch of what has already been done for the improvement of the dwellings of the poor. In the very able report issued towards the close of last year by the Dwellings Committee of the Charity Organisation Society the following summary is given of the Acts affecting dwellings:—

1. The Common Lodging-houses Acts of 1851 and 1853 enable the police in the metropolis to enforce sanitary regulations in "common lodging-houses"—i.e., *houses in which beds are let by the night.*

2. The various Nuisance Removal Acts, the Sanitary Act of 1866, and the Artisans and Labourers' Dwellings Act of 1868, otherwise known as the McCullagh Torrens Act, embody regulative provisions concerning the sanitary condition of houses generally, with powers, in extreme cases, of closing and demolition.

3. The Metropolitan Building Act of 1855 prescribes the conditions of future construction with reference to every description of building agency within the metropolitan limits; and the Labouring Classes Lodging-houses Act of 1851 and the Labouring Classes Dwelling-houses Act of 1866 enable local authorities to construct dwellings, and to borrow money from the Loan Commissioners at 4 per cent.

The working of the Common Lodging-houses Act seems to have been very effectual. "The common lodging-houses are reported to be superior to the average private lodgings of the poor in cleanliness, in ventilation, and all sanitary arrangements."

"It would be a great step in advance if the ordinary tenement houses occupied by the poor could have the benefit of similar regulations." It appears that the 35th section of the Sanitary Act of 1866 empowers local authorities to impose such regulations, subject to the approval of the Local Government Board, on all houses let in lodgings, or occupied by members of more than one family, not being "common lodging-houses," as the police are empowered to enforce against the latter. "Frequent reference," says the report above referred to, "was made during the sittings of the Committee to the desirableness of establishing a 'standard of habitability,' below which no dwellings should be allowed to fall. The section (35th of Sanitary Act of 1866) referred to is perhaps the most direct attempt that has been made to enable local boards to establish and maintain such a standard. The Committee have learned with regret that not only has this provision been sparingly adopted, but that, even where it has been adopted, serious difficulties have in some cases been encountered in applying it, owing partly to technical defects in the regulations which rendered magistrates powerless, and partly to want of determination on the part of local authorities."

We most thoroughly endorse the opinion expressed by the Committee. There are thousands of houses in the metropolis, built perhaps a century ago, which, according to our modern notions, are hardly fit for the habitation of a single family. These old houses are, many of them, crowded from cellar to garret with lodgers, and every room, or at most every floor of them, has become virtually a separate tenement—a tenement without, in many cases, an adequate amount of light, air, or cubic space, and always without a proper or sufficient supply of water, without a separate dust-bin, and without a separate sink. These dirty, dangerous tenement-rooms are often masked by the outward look of respectability of the house which contains them; and the saunterer in the London streets, who regards these houses as interesting relics of a past age, is little disposed to think that everyone of them perhaps is potentially a fever-nest. This report gives a list of the different companies and agencies which have been employed in the metropolis in improving the dwellings of the "weekly-

wage-earning classes." These societies are divisible into two classes:—1. Those founded on a charitable basis. 2. Those founded on a commercial basis. Another division of these societies into (1) those employed in erecting new buildings, and (2) those employed in improving old ones, might be made. The most important of the charitable agencies is the Peabody Trust. The amount of the Trust fund was, in November last, £600,000; and of this, £220,000 had been spent in the purchase of sites and the erection of buildings. "The large balance of unexpended capital will be used as soon as sites can be obtained; but so many obstacles exist to the sale of land in London that great difficulties are experienced in obtaining convenient areas." This paragraph needs no comment; and it shows, with a force to which no words could add, the necessity of giving increased powers to building societies for the acquisition of land. Of the societies founded on a commercial basis, the best known is that with which the name of Sir Sydney Waterlow is associated—the "Improved Industrial Dwellings Company, limited." This Society has spent £250,000 on the erection of buildings, and 5 per cent. on the outlay has been uniformly realised and paid to the shareholders. This Society accommodates 1268 families, comprising 6340 persons. The tenements are of three kinds—(a) those having three rooms each, and for which sums varying from 3s. 9d. to 6s. are paid weekly; (b) tenements of four rooms each, for which 4s. 9d. to 8s. are paid weekly; and (c) tenements of five rooms, for which a maximum sum of 11s. is charged. There is a scullery, closet, and water-supply to each tenement. The success of this undertaking shows that there ought to be no difficulty in providing any amount of house-accommodation for the poor provided the obstacles, in the form of the acquisition of land, &c., were removed.

Mr. Bosanquet, in his interesting little work, "London: its Growth, Charitable Agencies, and Wants," gives an account of the Marylebone Association, which has been employed in improving existing houses. "In such an association the benevolent element necessarily predominates, and the commercial element is likely to be weak. . . . . In its early years (it was established in 1854) the Association did not pay its shareholders more than 1 per cent., but it is now paying 3½, and has issued some preference shares at 4½ per cent. On the other hand, it has gone down to the very poor, and has probably been more successful than any other society in keeping and improving the people whom it found in occupation of the old houses which it purchased. Gray's-buildings, Duke-street, Manchester-square (twenty-one repaired houses let in single rooms at about 2s. 6d. a week) are the best example of this. They are still occupied by the same class, and by some of the same people that were in possession of them before they came into the hands of the Association." The account of this society is encouraging, although, which is also encouraging, it seems to show that it is more profitable to build new dwellings than to tinker up old ones.

The examples we have given show what has been done by the various societies, and the success of these societies makes it, we hope, certain that much more will soon be accomplished. The various improved habitations provide accommodation for 27,000 persons only, "which does not very much exceed one-half of the increment of the metropolitan population in a single year."

One great obstacle to improvement is the fact that to unscrupulous landlords, we mean the "middle men," and not the landowners, this crowding of the poor into houses is a great source of profit, and there can be no doubt that many men have amassed large sums from the rental arising from unwholesome houses.

With regard to the new houses of an inferior class, which spring up like mushrooms in and around London, it is well known that they are full of sanitary defects. In January, 1873, Dr. John Liddle, the medical officer of health for Whitechapel, read a very able paper on the defects of the Building Act of 1855, before the Social Science Association. Dr. Liddle showed that, in spite of this Act, houses might be, and frequently were, built upon foundations of "dry rubbish," without any contrivance to prevent the damp rising in the walls; without any deep or superficial drainage of the roads leading to them; without house-drainage and the necessary appurtenances of a house—water-closets, water-supply, ventilation; without the possibility of through-ventilation, as when houses are built back to back; without proper eaves and gutters; in short, without all that distinguishes, or should distinguish, a house from a mere disease trap.

In a very able article in November last, the *Pall Mall Gazette* called attention to what it rightly enough spoke of as the "adulteration" of houses. "The man who sells or lets a house should be held answerable for that house being free from any additions injurious to health. There should be no reserve of foul air in the rooms caused by the want of proper ventilation; there should be no circulation of sewer gases in the basement, caused by the absence of proper traps from the drains; there should be no pollution of water caused by the escape-pipe of the cistern running directly into the sewer. These things are no necessary part of a house—they are as much adulterations as alum is of bread or sand of sugar."

THE REGISTRAR-GENERAL'S ANNUAL REPORT OF QUEENSLAND.

WE have received a copy of the above report on the vital statistics of this colony for the year 1872, and our readers may be interested in the following points gleaned from our analysis of that document. The estimated population on December 31st, 1872, was 133,553, of which there were 79,618 males and 53,935 females, or nearly 59·6 per cent. against 40·4 per cent. The total increase in the population during the year 1872 amounted to 8407, or at the rate of 6·7 per cent. on the estimated population at the end of 1871. It may be stated that the ratio of increase during the year attributable to immigration was about 4·06 per cent. on the estimated total at the end of last year, as against 2·7 per cent. from the natural increase of births over deaths. As a general rule throughout the world, the proportion of males born slightly exceeds that of females, and the ratio is remarkably uniform. This rule has been borne out by the returns in this colony from its commencement, with but one previous exception—viz., in 1863, but the number of female births for the year 1872 exceeded the males. Amongst the births recorded were 49 cases of twins, as against 60 in 1871. There was one case of a quartette, but all the children died within forty-eight hours. Of the total deaths throughout the colony, there were 892, or over 46 per cent., under five years of age; 756, or over 39 per cent., under two; 4578, or 29·85 per cent., under one year. These numbers are seriously high, although not presenting, we are told, any very noticeable variation from similar ones in previous returns.

LEGAL SECURITIES TO LIFE AT SEA.

RESOLUTIONS passed by the Council of the National Association for the Promotion of Social Science, for presentation, by deputation, to the President of the Board of Trade:—

1. That it is advisable to secure medical registration and legal inquiry by the coroner in the case of deaths on the high seas in registered British ships, with a view to diminish mortality in the British mercantile marine.

2. That in case of all deaths during the voyage, the causes and treatment should be inquired into by a medical officer appointed to attend the shipping office when the crew is being paid off, and that he forward, without delay, to the Registrar-General, a medical certificate of the cause of death, the same as would have been required had the death occurred on land.

3. In the case of suspicious, accidental, or violent death, that the medical officer or Registrar-General of England should invoke the aid of the coroner of the district, as if it had taken place on land and the body were lying in the district in which the ship is paid off, although the body shall not be forthcoming.

4. In case the coroner's jury inculpates any person in connexion with the death, that the local police, acting under the direction of the Attorney-General or Solicitor to the Treasury, should take charge of the prosecution.

5. The expenses of medical registration of deaths at sea might be defrayed out of the unclaimed wages of deceased seamen.

THE LANCET.

LONDON: SATURDAY, MAY 2, 1874.

THERE are two points of view from which we may look back with great interest upon the late discussion on Cancer at the Pathological Society. The first of these is the manner in which the word "cancer" was generally employed; the second relates to the practical bearings of the cancer question at the present day.

Mr. DE MORGAN'S definition of cancer was that which is generally recognised by histological pathologists as belonging to new formations of an epithelial nature, and by it the connective-tissue tumours which often show certain and well-marked characters of malignancy were excluded. In spite of this definition, the majority of speakers used the word merely as an equivalent for malignancy, without reference to tumours of an epithelial or a connective-tissue type, and without reference to origin or to structure. To our continental brethren this will appear more extraordinary than it does to ourselves. Surgeons in large practice, to whom malignancy in new growths occurs as a common but most important fact, and who have been in the habit of employing the older classification of tumours, have not the time to devote to making themselves acquainted with all the newest forms of classification and the minute characters upon which the different species are arranged. Tumours the naked-eye appearances of which are similar, and which show the same tendency to spread from tissue to tissue, and again to distant parts, are naturally regarded as belonging to the same species, and are named accordingly cancers. The anatomical classification has not been well received in England, although the first attempt in this direction was made by an Englishman of no mean celebrity. About the beginning of the present century ABERNETHY published a short essay in which he endeavoured to classify tumours according to their likeness to normal parts, and the word "sarcoma" was used by him, but much more freely even than it is at present, and in a far different sense. A sarcoma was merely a tumour having a "firm and fleshy feel"; and the word was affixed to various adjectives—as pancreatic, adipose, &c.—without itself conveying the idea of any more special characteristic. The arrangement of ABERNETHY, however, never became generally used, and the word sarcoma was rarely employed. With the vast impulse which the knowledge and improvements of the microscope gave to the study of tumours, the anatomical classification was revived. The greatest work on the subject of the new era is that of VIRCHOW, the basis of which may be discovered in the smaller and less pretentious work on the nature of Cancer previously published by MÜLLER. Unfortunately, with the revival of the anatomical classification, VIRCHOW reintroduced the term "sarcoma," but limited it to tumours composed of connective tissue with an excessive development of cellular elements. The confusion to which this gave rise may be easily imagined. Many of the tumours included by VIRCHOW amongst the sarcomata were those formerly classed with the carcinomata, and still indistinguishable from the true cancers by their naked-eye characters. In truth, it has not always been found easy to distinguish the difference even with the aid of the microscope. The confusion has been still further increased during the last few years by other variations of meaning which authors have attached to this same word. Nevertheless, it has been used by almost all authors of the last ten years, and it is gradually becoming settled down to signify tumours consisting of the various forms of embryonic connective tissue. It appears probable that it will continue to be employed by pathologists, not on account of any relation which it bears to these new growths, but because, like many other terms, it is sanctioned by frequent use for some years. This word alone has rendered the anatomical classification objectionable to English surgeons; but this is not all. The old arrangement had this advantage: that the terms used by the pathologist were those which also suited the practitioner; and even if by chance a growth belonging to the innocent tumours happened unexpectedly to show characters of malignancy, it was supposed either that the tumour had become malignant at a later date, or possibly that an inaccurate diagnosis had been made. When, however, the suggestion was made to arrange all new growths according to their minute structure, but without any particular reference to their physiological characters, surgeons acquiesced so far as to adopt the new nomenclature to a certain extent, but still expected that the name would in some sort be an index to the clinical characters. It was soon discovered that such was not the case, and the feeling of disappointment which was inevitable ensued. This feeling gave place to another, almost of contempt, when time showed that the new method of arrangement was by no means settled, that it was subject to continual change, and that pathologists themselves were frequently at open issue upon the values to be applied to certain terms. In spite of the dissatisfaction which has prevailed, we believe that the anatomical classification will in time be generally adopted. For many years, perhaps even for centuries, it will be subject to slight changes. But it may be said of this, as MILNE-EDWARDS has said of the zoological classification—that its instability, "far from being a defect, is the necessary consequence of its perfectibility." As the names of tumours are more accurately employed, their natural history will be more carefully studied and more certainly understood. The word cancer will, nevertheless, probably long continue to be employed as it is now, and as it has been in years past, for all tumours which are undoubtedly malignant, without respect to their structural differences. It is likely still longer to retain its position as a popular term, with the same signification. With the continued employment of the newer nomenclature, and with the better understanding of the spirit of the anatomical classification, will gradually vanish one great objection to it which now exists—the difficulty, namely, to examiners and those whom they examine. That the work is hard to both, and that both should complain, we can well understand. But while we sympathise, we also believe that, so far from rendering the subject more complex and

difficult, the more scientific and better system of arrangement will in time be regarded as a boon by both parties. Should this be the case, Dr. PAYNE will not be obliged to reiterate his plaintive appeal for a little "more indulgence" for the histologists.

We wish we could look forward as hopefully to the future of the treatment of cancer. The improved knowledge of the present century has only taught us more certainly how powerless we are against the disease. Once let it arrive at such a degree of perfection as to be recognised as cancer, and we are obliged to confess that our treatment is at the best only palliative. True, there are men so sanguine as Mr. HUTCHINSON who believe that they have succeeded by early removal of a budding cancer in absolutely arresting the disease. But this can hardly be accepted as an equipoise against the weight of testimony on the other side. Everything tends to show that at present we must consider cancer as practically incurable by removal. Cut it out as early as we may, we yet feel certain that the days of the patient are numbered. Destroy it with caustics, the result is the same. In the present state of knowledge, then, we have nothing to hope for from local treatment, however much the disease may be said to be local. Let us turn to the constitutional side, and see what we are to look for from it. However cheering the conclusion of Sir JAMES PAGET'S speech may be, the earnest hope expressed that a remedy not only may but will be found for cancer, such as mercury is for syphilis—"a remedy as distant in all conceivable relations from the disease of syphilis as any one part of the world is from another,"—however cheering, we say, this may be, still the consolation to be drawn from it is but small even to the most sanguine of believers. In practice such a creed is at least tens of centuries old, for the writings of the ancients contain sufficient evidence that such a specific was sought for, although not found. The works of modern surgery not only declare a belief that it may be found, but more than once have heralded forth some drug as the true antidote of the horrible cancer-poison. Even the discovery of the worthlessness of each of these has not shaken the faith in the existence of such an antidote. Whoever is curious enough to look back only one century will find Dr. ANDREA, then physician to the London Hospital, in the preface to a pamphlet written against the use of hemlock for cancer, not only continuing to express the hope that a specific may be found, but encouraging our forefathers not to despair of it, since "the use of mercury is but a modern discovery, unknown to the ancients, which penetrates and resolves venereal indurations of as compact a nature as, if not more so than, that of cancer." We must therefore own that, although the much-desired remedy may exist, and may at any moment be brought to light, it is equally possible that we may have to wait for it for some centuries yet. In the meantime how are we to treat cancer? We have gradually come to the opinion, the strength of which increases rather than diminishes, that the removal of a cancer, when practicable, is the best treatment; that, even if it does not delay the fatal termination for a single day, it is yet worth the patient's while to submit to the risk and trouble of operation, with the view of removing a continual source of fear and misery and of rendering the end more easy. Even before the improvements in the methods of operation and before the introduction of anæsthetics this was the prevailing opinion. Now, naturally, it is still more so. But we may do more than this. We have improved in diagnosis, and consequently in prognosis. This we may undoubtedly use to the advantage of our patients. It is often of the greatest consequence to be able to foretell as early as possible what the result of a disease will be. Of no disease are we more certain than we are of cancer, although we cannot so certainly predict the duration. Again, we are in a position to warn those in whose families cancer is strongly hereditary that in becoming parents they are likely to hand down to their offspring the hideous tendency which has not yet developed into a reality in themselves. We are in a position to do this, and it becomes a duty to us, however unacceptable it may be. If the debate on cancer had been of no other use than to strengthen our knowledge on these points, the time and labour bestowed upon it would not have been spent in vain.

THE correspondence which we published last week in reference to the way in which the Out-patient Department of St. George's Hospital is conducted, and which has since appeared also in *The Times*, is calculated to be of great use as a contribution to the discussion of a most important and complicated question. It is true that some very distinguished members of our profession appear in the discussion rather to a disadvantage. They seem to have committed themselves to representations of what was going on in St. George's Hospital without taking any trouble personally to verify their representations, and in this way to have acted inconsiderately towards their own great authority. Criticism, like charity, is never so effective as when it begins at home. Any remonstrances against the out-patient arrangements of St. Bartholomew's, Guy's, or King's College Hospital from Sir JAMES PAGET, Sir WILLIAM GULL, and Sir WILLIAM FERGUSSON would have been simply irresistible. But instead of criticising the out-patient departments of hospitals which they were familiar with, and which, if all accounts be true, supply the principal excuse for such homilies as those which, in one form or another, we get weekly now from the Charity Organisation Society, these gentlemen suffered themselves to be drawn into the unseemly position of accusing the arrangements of another hospital which has distinguished itself by its efforts to remedy alleged abuses of the out-patient department—in other words, they set themselves to the ophthalmic operation of extracting a mote from another's eye, while tolerating with silence a very much larger one in their own. Still, for all that, we do not regret the position of Sir WILLIAM FERGUSSON, Sir JAMES PAGET, and Sir WILLIAM GULL in this matter. No one would doubt for a moment that they did what they thought right, and only committed themselves to an application to St. George's Hospital of doctrines which they consider to be well established. The authority of their names has secured an attention to representations which might otherwise have been disregarded, and to the whole question of the out-patient department of our hospitals. As regards this department in St. George's Hospital, the careful statements of the portion of the staff which has

charge of it, contained in THE LANCET of last week, will be read with interest. We have taken some pains to satisfy ourselves of the fitness of the patients and the moderateness of the numbers.

That the Out-patient Department of hospitals is abused admits of no doubt. The reports of our own Commissioners in regard to some of the London hospitals show that it is or until very lately was, conducted in such a way as to be of the least advantage to the patients, to the student, and to the physician. But that it should be swept away is another question altogether. And this virtually is the prayer of the memorialists. They ask that, in consideration of the establishment of two or three provident dispensaries, the payment of the members of two of which amount respectively to £204 and £96 (!), the arrangements of St. George's Hospital be all altered, that only cases of peculiar interest or difficulty be treated at the hospitals, and that the ordinary, or, as the memorial puts it, the "*ordinary trivial*" cases be referred to the provident dispensaries or to the Poor-law dispensaries. This is rather cool advice to charitable men as to how they shall use their own subscriptions. But there is something cooler to follow—viz., that the committee and medical officers of the provident dispensaries should have the *potestas clavium* of a hospital for which they do not labour and to which they do not subscribe. If all cases are not to be admitted through provident dispensaries, provident dispensaries are at least to be the great portals for admission into the hospital. It will be seen by our readers that the scheme of the memorialists is the very bold scheme which has just failed so signally in Manchester, though it was there propounded after much more labour and proper conference of interested parties.

The fact is that there is more of good and usefulness in the out-patient system than is dreamt of in the philosophy of the Charity Organisation Society. In the first place, common ailments are not so trivial as the memorialists seem to think; and to imagine that, on the strength of a memorial from sixty-one gentlemen—forty-three of whom have no connexion with St. George's, and do not subscribe to it,—the great hospital of the West-end of London could close its out-patient rooms without cruelty to a huge population is to conceive very inadequately of the seriousness of the common ailments of the poor, and very inadequately of the services of the medical staff by whom they are treated. It is well known that more careful investigation into the amount of abuse of the out-patient department has demonstrated that many of the statements about it have been greatly exaggerated. In the second place, if hospitals are to be restricted to the reception of rare and peculiar cases, hospital practice will cease to be of its present value as a principal means of medical education. The run of medical practice is better represented in the out-patient department than in the wards. No candid hospital physician would deny his obligation to the out-patient department as a field in which he acquired familiarity with disease and readiness in deciding upon its nature and treatment, or refuse to admit that he was largely prepared in the out-patient rooms for the higher work of the wards. Besides, the wards are fed by the out-patient department. Medical apprenticeship is now wellnigh abolished, and the opportunities for the study of common—not trivial—disease are much less than they used to be. As places for the relief of human suffering and for conducting medical education, hospitals would suffer immensely in reputation and in value if those who manage them were hastily to adopt the crude suggestions of the memorial, which, notwithstanding some honoured names (some of which, we believe, have been already withdrawn), we have felt compelled to criticise. In all that we have said, we do not mean to deny that there are abuses in the out-patient system; but that they can be removed by non-subscribing critics without imperiling the great hospital system which does so much to diminish human misery and to advance medical science we very gravely doubt.

THE first chief step towards the solution of this vexed question has been made by the presentation of a Report to the Committee of Management from the referees, Lords HATHERLEY and SELBORNE. This Report, which has already appeared at length in some of the daily journals, reviews the main grounds on which the dispute in question appears to rest, and, proceeding on the assumption that it is desirable to maintain the connexion between the hospital and St. John's House, sets forth the legal and "equitable" aspects of the question. These are briefly:—(1) In the King's College Hospital Act nothing is included by which the nurses of St. John's House can be properly termed officers, servants, or agents of the hospital, so that a direct power of dismissal, removal, or suspension of any of them cannot be properly maintained, inasmuch as the contract for the performance of the nursing is not with the individual sisters or nurses, but with St. John's House. (2) The terms of an agreement made with the authorities of St. John's House in 1856, by which they were also to provide for the duties of matron, were set aside in 1872, to the manifest disadvantage of all concerned. "Not only is there no matron nominated by St. John's House, but there is now no matron at all, and the Secretary, who, by the bye-laws, is to 'have the immediate superintendence, subject to the rules and orders of the committee, of all the resident officers and servants of the hospital,' and who 'shall reside in the hospital, if required, or in such place as the committee shall approve in the immediate neighbourhood,' has been for some time non-resident (we believe not now residing even in the immediate neighbourhood of the hospital), though he attends regularly at the hospital for certain hours in every weekday, we are not sure whether or not regularly on Sundays." (3) The present relations between the medical and nursing staffs are unsatisfactory, inasmuch as "the chief medical officers, who do not reside in the hospital, cannot be appealed to upon every emergency as it arises; and the resident medical officers are very young men, chosen among those who have been recently pupils or assistants in the hospital, and changed every six months."

The first, or legal aspect of the matter, being disposed of, the referees submit the following recommendations, with a view to remedy the defects above recorded:—

"1. A matron should be appointed (if possible upon the nomination or recommendation of St. John's House, as contemplated by the agreement of 1856), to conduct all those departments of domestic economy within the hospital

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which can properly be placed under female superintendence; and if it should not be thought practicable or convenient to revert, in this respect, to the principle of the agreement of 1856, that the matron should, at all events, be a person on whose ability and disposition to co-operate cordially with the sister in charge and the nursing staff full reliance can be placed.

"2. One of the resident medical officers of the hospital should be a permanent officer, of such age and experience and invested with such authority as may tend to ensure for him the confidence and deference of the sister in charge, and also of the secretary and matron and junior medical officers.

"3. All such suggestions and complaints to or by the sister in charge as are contemplated by Articles 13, 14, and 16 of the agreement of July, 1872, should be made, as far as possible, and as a general rule, by way of communication, as soon as the matter arises, through or with the permanent resident medical officer."

Passing by an alternative suggestion relative to the resident medical officer, recommendations are made with a view to ensure that each and every nurse of St. John's House doing duty in the hospital shall be known to the Committee of Management or the secretary by a distinctive name or number, and that the concurrence of a majority in number of the permanent medical officers of the hospital, signified in writing, should (without any other cause shown) be deemed a sufficient reason for the removal of any sister or nurse.

In expressing a hearty concurrence with the very practical recommendations suggested by the learned referees, we may remind our readers that during the last six or seven years we have at sundry times and in divers manners shown the advisability of having on the staff of all our large hospitals a permanent and responsible resident medical officer, who, possessing the confidence of the general, secretarial, medical, and nursing departments, shall, in all questions of dispute, be on the spot, and settle small matters promptly and decisively. Two of our largest London hospitals have possessed such an officer for many years, and the advantages of the plan are acknowledged by all familiar with the internal working of these institutions. And it appears to us equally proper and consistent that the chief of the nursing staff should co-operate cordially with the matron, and that the former should (in this case) have some sort of control over the latter. We shall be enabled next week to report the action taken on the Report at a meeting of the Governors that will be held to-morrow, and, in registering a hope that the recommendations of the referees will be adopted, take leave to remark that Lords HATHERLEY and SELBORNE, in the exercise of a somewhat difficult and very delicate task, have seized the salient points, and dealt with them in an eminently practical manner.

THE annual election into the Council of the College of Surgeons will take place in two months' time, and it will be well therefore to mention its prospects, so far as they are at present known.

Mr. SOUTH'S retirement leaves one absolute vacancy, and it was anticipated that Mr. HILTON would also have retired. This, we are informed, on good authority, is not, however, the fact; and we regret it, for Mr. HILTON will have completed twenty years' enjoyment of the sweets of office as a Councillor, and is still an Examiner. He has also been President and Hunterian Orator; and we think, therefore, that he should make way for others, and trust that he will yet reconsider his determination. Mr. MARSHALL will, as Mr. CHARLES HAWKINS'S representative, have to stand another election, inasmuch as he was last on the poll in the election of 1873.

It will be remembered that Mr. COOPER FORSTER and Mr. SAVORY at that time went to the poll, Mr. FORSTER being only one vote behind Mr. MARSHALL. Since misstatements respecting the seniority of these gentlemen have appeared elsewhere, it may be well to state that they are both Fellows by examination, Mr. FORSTER having been admitted in 1849 and Mr. SAVORY in 1852. Mr. SAVORY intends, we believe, to present himself again on the coming occasion, but Mr. FORSTER'S views are at present unannounced, though we hope he will again seek an honour to which he is by his professional position fully entitled. The fact that Mr. FORSTER is one of the representatives of the University of London in the Committee for the Conjoint Scheme would make his presence at the Council-board of the College especially valuable.

We have already (March 21st) referred to the proposals emanating from Birmingham to bring forward a representative of the provincial hospitals in the person of Mr. ALFRED BAKER, who is a Fellow by election of 1852. Mr. BAKER is undoubtedly a very fit and proper candidate for the Council, if he is prepared to devote the necessary time to the work of the College. There is a practical inconvenience, however, in adding to the number of country Councillors that it would throw so much extra work upon the metropolitan Councillors in attendance upon committees at the College. So much of the business of the College is done by committees that a Councillor living at a distance must either shirk his duties or will have to travel many hundreds of miles in the year with very little satisfaction and no remuneration for his expenses and losses. It has been proved to be impossible for a gentleman residing in the country to hold the post of Examiner, and we hold it to be equally impossible for him to fill the President's chair.

"SMALL by degrees and beautifully less," the Naval Medical Service is gradually diminishing by the retirement of all ranks as soon as opportunity offers, and by the non-entry of new men. We have never supported the outcry made from time to time against the maintenance of suitable discipline in the department or on board Her Majesty's ships. Anyone who knows anything of the internal economy of a man-of-war must be aware that it is no real hardship to go through the customary routine of the service in asking leave to go ashore, any more than it is to touch the cap upon reaching the quarter-deck. If a medical officer is a gentleman and a really good man he has little to complain of in his treatment by the executive, who are only too glad to be on friendly terms with him, and to refer to him on all scientific matters. It is not here that the shoe pinches, or, if it does, for the most part the medical officer has himself to blame.

The questions of pay, promotion, and retirement are

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those to which the Admiralty must direct their attention if they wish to make the service popular. They must remember that at Netley the young naval officer is brought into close contact with not only the future army surgeon, but the future resident in India, with the certainty of a high rate of pay, and the prospect of an ample retirement. The naval surgeon may, and probably will, have to serve in the Indian Ocean, and will then have precisely the same pay as in England, while his fellow-student in the British army on shore will be drawing double pay, and the Indian officer enjoying possibly large emoluments from some civil appointment.

Again, although to a young and unmarried man a sea life may be enjoyable, it is by no means pleasant for a staff-surgeon with grey hairs to have to go to sea; and some measure by which the age for active duty of this kind should be limited is urgently demanded. If it is not possible to find shore-going appointments for all the seniors of the service, at least they might have an advantageous opportunity of retirement offered them; and thus the lists would be cleared. At present, an officer, by the time he reaches the upper ranks of the service, is not only soured by long waiting for office, but has so completely dropped behind in the scientific race as to be unfit for any but literally duties of inspection; and this fact cannot but have an injurious effect upon the young men who join the naval hospitals to learn the routine of duty—to say nothing of their being exposed to the grumbling of their seniors, whose merits have failed to obtain recognition.

Our advice to the Admiralty would be to make the seniors of the service contented and satisfied with their rates of pay and retirement, and then to leave them to leaven the whole service with a spirit of satisfaction and loyalty which certainly has little or no existence at present.

Medical Annotations.

"Ne quid nimis."

MEDICAL REGISTRATION OF DEATHS AT SEA.

A DEPUTATION from the Social Science Association waited upon the President of the Board of Trade on Friday last, to urge the advisability of securing medical registration and legal inquiry by the coroner in the case of deaths on the high seas in registered British ships, with a view to diminish mortality in the British mercantile marine. It was shown that one-third of the deaths at sea are supposed to arise from disease, but no inquiry into the cause of death is made by anyone conversant with disease, and therefore no check is placed on mis-treatment, ill-treatment, or more culpable treatment. Also that another third of the death-rate arises from so-called "accident" other than shipwreck, but though this includes about 1500 lives annually, no legal inquiry is made into the nature of the "accident"; whilst the remaining third of the mortality arises from shipwreck, for which only one person had been punished these twenty years. The natural consequence of the absence of all inquiry into the cause of death in the mercantile marine was stated by the Registrar-General to be that, "the dangers of the sea are, in the merchant service, fifteen times as great as the dangers on land." But the deputation held this to be an understatement, as the figures quoted by the Registrar-General did not include seamen landed in England in a dying condition, but only those who died actually on the high seas, or in foreign ports. It was stated that if the ratio of deaths by violence ("accidents," &c.) had in 1871 been the same as in the Royal Navy during the succeeding year, 2585 persons would have been alive who had been killed in some unascertained way. And similarly as to the general mortality, it was shown that, following the ratio of the Royal Navy, 2647 merchant seamen should not have died who did die in that year. Moreover the ratio of the Royal Navy included that of men-of-war's men who died in English hospitals, or in action, or from gun-exercise wounds—cases not included in the ratio of the mercantile marine. Dr. Hardwicke, deputy coroner for Middlesex, drew attention to the alterations of law required to meet the case of the absence of the body, and quoted the instance of mortality in prisons as an apposite case of the jurisdiction of coroners, which might apply to their proposed jurisdiction over seamen. The moral effect of a public knowledge of the cause of death in reducing mortality was instanced from the Royal Navy, the returns of which were first made public in 1856, since which year the death-rate had fallen more than one-half, the reduction being both in that of accidents and of disease. A similar knowledge of the cause of death would, it was thought, serve to check the reckless disregard of life which is characteristic of the mercantile marine, because it was so unquestioned by law.

CRAMMING.

Apropos of our existing system of competitive examinations for everything, and the method of conducting examinations in general, Professor Tait, of the University of Edinburgh, made some observations in his address to the graduates of that university on the occasion of the late annual ceremony of "capping." The Professor suggested that the only way of getting rid of "cram" was to take your candidates, when fully charged for an examination, and let their minds lie fallow by sending them to sea for several months without books, pens, ink, and paper, and then suddenly introduce them into the examination hall. We wonder how many men with "full minds" would find them a blank by the process; and whether the class of crammers would long survive if this method were pursued. Those who have had most experience as examiners have perhaps least reason for extolling the advantages of our present system. The difficulty is to find any good substitute for it, or one that is open, on the whole, to fewer objections. Many young fellows are endowed with good receptive faculties and excellent memories, and their powers of "cram" are unlimited; but what they acquire with so much facility they equally easily forget. The truth is that they do not really assimilate what they have learnt, and their information, to borrow an illustration from Sheridan, is like marl upon a barren soil—it encumbers what it does not enrich. Then, again, there is a class of youths who have the faculty not only of acquiring with great rapidity, but of turning all they know to account by aid of a kind of mental agility and promptitude of judgment, combined with a fluency of style in expressing what they know. Such men, after passing brilliant examinations are apt to become literary prigs; their information is a veneering, and its shallowness, which is from the first discoverable to those who intellectually "close with them," leads to it being soon dissipated by time and the heat of real mental work. Cramming is, like desultory reading, destructive to the concentration of thought and attention necessary to intellectual robustness, and the knowledge of principles and mode of thought displayed by the insufficient answers of ca

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student may give evidence of an intellectual calibre and quality of training on his part which the fuller and more adequate replies of another student may fail to show. Where examiners can apply practical tests as to the quality of the educational training, which is now much more the aim than formerly, the results of an examination afford a real index of the merits of those undergoing it. The competitive examination for the Royal Military Academy, Woolwich, is stated to work well, and to secure a very good class of men; but mathematics occupies a prominent place in that examination, and a student cannot, by a mere effort of memory, cram so successfully in this as in other branches of knowledge. After all, competitive examinations, if they fail to apply any test to certain qualities of mind and character the possession of which is very desirable in public servants, serve to exclude dullards; and although the best men may not always take the place their abilities and education deserve, they nevertheless take a good one at starting, and improve it as they proceed. It is the abominable system of cramming a certain amount of information on all subjects, in order to make up the requisite total number of marks to qualify or take a good place, that tends so much to debilitate rather than to develop the mental energies.

SANITARY CONDITION OF SHEFFIELD.

THE First Annual Report of the Medical Officer of Health for the Borough of Sheffield is, in some respects, the most striking of the first essays in sanitary exposition which the Public Health Act of 1872 has been the means of bringing under our notice. It is noteworthy especially as to its form, Dr. Griffiths having adopted the folio in preference to the octavo size; and it is somewhat bountifully illustrated by coloured diagrams, which, no doubt, convey a more vivid impression of the statistical facts than is likely to be obtained from long tables of figures. We suggest, however, that in future the tables and diagrams might with advantage be thrown together into an appendix, so that the continuity of the report may not be interrupted as it is in the present case.

Sheffield borough is not exempt from that bane of all our organisations for local purposes—want of uniformity in administrative areas. The municipal wards neither correspond with the Poor-law districts, the vaccination districts, nor the registration sub-districts. The mortality in 1873 was 26·6 per 1000, as compared with 26·5 in 1872, and 28·5 in 1871. Upon the subject of infant mortality Dr. Griffiths says, at p. 16, that, "out of every 100 children born in Sheffield, 29·3 die before they are one year old, and this statement is repeated at p. 52; but it is clear from the facts given at p. 16 that the true proportion of infant deaths to *births* is 19, while 29 per cent. is the ratio of infant deaths to the *total deaths*. Further, in comparing the loss of infant life in Sheffield with that which rules "in healthy districts," he quotes the infantile "death-rate from all causes" in the latter as "12 per cent."; whereas the "healthy district life table" shows that the proportion of deaths in the first year of life to 100 born is 10. Against slips of this kind it is needful for those who have occasion to employ statistics to be vigilantly on their guard. With regard to zymotic disease, we note that the small-pox epidemic, which cost Sheffield 406 lives in 1871 and 600 in 1872, had almost disappeared last year, only causing 5 deaths altogether. The vaccination-returns indicate that 19 per cent. of the children born in 1873 remained unvaccinated at the end of the year. Dr. Griffiths calls attention to a matter which has probably not been much in the thoughts of those who are laudably anxious to promote the spread of education, which is that (unwittingly enough of course) they may have been indirectly promoting the spread of zymotic disease. Scarlet fever, measles, and whooping-cough, he remarks, have their principal foci in school-rooms, and it is suggested that the Government capitation grant may be an inducement to teachers to get children who have been attacked back to school before they are convalescent. If this be so the Education Department should look to it. Sheffield seems to be no better off than other towns in respect of the housing of the lower classes of its population, though it is probably not worse; and in all there is want enough of such remedial measures as are indicated in this report. The pollution of rivers, streams, &c., in and around the town is evidently deplorable, and of so much of this as is said to constitute "a dreadful menace to the health of the people" the authorities will surely make a speedy ending. Into Dr. Griffiths's observations upon the general working of the Public Health Act we have not space to enter, nor can we touch upon other subjects that are dealt with in his report, for the prompt preparation and issue of which he is justly entitled to praise.

THE SWALLOWING OF FORKS.

OUR Paris correspondent recently mentioned the case of a young man, now under the care of M. Labbé, who accidentally swallowed a fork. We shall look forward with interest to the progress of the case.

Public attention having been turned to the subject, the papers have put upon record cases somewhat similar, which were observed several years ago. *L'Union Médicale* has especially related two of these which are rather striking. They are as follows:—

The first was inserted, in 1843, in the *Annales Méd. Psych.* The fork was of pewter, and six inches long. When, on a post-mortem examination, the gastric fluids had been removed, it was found that the fork had turned quite black, was covered towards the handle with a kind of unctuous, rugous layer, and looked varnished towards the prongs. The latter, which seemed to have been purposely compressed, looked in the direction of the cardiac extremity of the stomach, and the handle lay towards the pylorus. The mucous membrane bore traces of inflammation. During life the following symptoms had been observed: Frequent colic connected with diarrhœa; a fixed pain in the epigastrium; and several attacks of vomiting. It was also recollected that the patient seemed to move about with difficulty, and would protrude the epigastric region. In speaking he would stretch himself up, carry his hand, involuntarily as it seemed, to the epigastrium, and wince as if in pain. The patient, who was insane, had stated five or six years before his death that he had swallowed a fork, but this had not been attended to, and the matter was soon forgotten. The patient himself did not mention it any more, and ascribed the pain he suffered to the poison administered by the supposed enemies with which he was surrounded. He was an educated man, and spoke with great fluency and elegance. His face, which was not handsome, became quite interesting when he made speeches. He had been kept from the other patients because he excited them by pernicious advice. He finally hanged himself, and left on his table the Book on Wisdom, written by Charron, which was found open at a passage where the author justifies suicide.

The other case was sent to M. Labbé by a relative of the patient. It referred to a lady who, in a moment of passion, had left her husband, and repaired to her mother's chateau. Being alone in her room, she secretly swallowed a fork. The servant was suspected of theft, but the lady tried to shield the girl. She lived, however, as usual, without complaining of any pain. In a few months the fork formed a swelling in the stomach; it caused pain, and then the

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patient disclosed what she had done. A consultation was immediately called, and, on examination, it was found that the fork had worked its way towards the skin. The surgeon, three or four days afterwards, made an incision into the gastric region, and the fork was withdrawn without exciting much pain. It was as black as coal. The patient recovered perfectly, and subsequently bore several children.

M. Labbé, under whose care the young man has been placed who had the misfortune to swallow a fork as stated at the head of this article, has had an instrument constructed by M. Collin, with which the existence of the foreign body in the stomach has been proved. Simple palpation was of no avail. It consists of a hollow metallic ball, fixed on a very flexible stem, also of metal. On one end of this is a kind of drum which is to intensify the sound. To this drum an india-rubber tube is attached, ending in an ivory canula, which is to be placed in the observer's ear. The least metallic friction on the ball carried into the stomach gives quite a loud noise in the ear. For the last five days the patient has had much pain in the large curve of the stomach; the pain is distinctly limited, and much increased by pressure. M. Labbé does not think any interference necessary just now.

AMENDMENT OF THE APOTHECARIES ACT.

IN order to enable the Society of Apothecaries of London to co-operate with the other medical bodies in the Conjoint Scheme, a Bill has been brought in by Sir John Lubbock, Dr. Lyon Playfair, and Mr. Plunket. So much of the Act of 1815 as makes it difficult or impossible for the Society to act with the other licensing authorities is repealed, including the celebrated apprenticeship of not less than five years to an apothecary clause. The fourth clause in positive terms enables the Society to co-operate, with the sanction and under the direction of the Medical Council, with other bodies mentioned in Schedule A, notwithstanding that the number of examiners in a Conjoint Board may exceed twelve, and the fees to be fixed for examination may exceed six guineas. Advantage is taken of the Bill to enlarge the liberty and powers of the Society in various respects. The Society has never been able to strike off from the list of its licentiates persons convicted of felony or misdemeanour. This power is given in Clause 5 of the Bill. Henceforth the master, wardens, and assistants are not to be restricted as to the qualification of examiners for the purposes of the examination of apothecaries and assistants to apothecaries throughout England and Wales, but may appoint any persons who shall be at the time of such appointment duly registered under the Act of 1858.

MOUNTED MEDICAL OFFICERS.

THE War Minister's reply to Mr. Herbert's question, as to whether a medical officer in the army could not ride, caused, as it was calculated, some degree of amusement. Mr. Hardy said that the medical man in question had just been appointed when the troop of Horse Artillery to which he was attached marched from Bristol. "He had no horse, and when asked said he was a very bad rider, if he could ride at all; and as there was not a very steady horse available, the commanding officer offered the medical man a ride in his dog cart." If the officer had to ride one of the battery horses temporarily told off to him for the purpose we can quite understand that he would prefer a seat in a friend's dog cart, for the paces of some of these battery nags are such as to threaten confusion to their rider's internal organisation, who feels, on dismounting, at a loss to know whether there is any longer a division between his abdominal and thoracic organs. So far for the man who knows how to ride and when to decline; but the officer in question declined from not knowing how. If so, he seems to be the right man in the right place, for have not the army medical officers been deprived, by the late Warrant, of their forage while they retain their spurs? The spurs are not of much good without the horse, but the horse requires forage and the spurs don't. To be of any use in the field medical officers must be mounted, and that is a shortsighted policy which tends to discourage them from becoming skilful horsemen.

A MANCHESTER PHYSICIAN ON THE PROVIDENT DISPENSARY SCHEME.

DR. FRANK RENAUD, consulting physician of the Manchester Royal Infirmary, has written a letter on the Provident Dispensary Scheme, in defence of those who have expressed themselves as unmistakably adverse to the scheme. Dr. Renaud regards the question from the point of view of three different parties interested—the governing bodies of existing charities, the medical profession, and the working classes. Dr. Renaud compares the acceptance of the provident arrangement by a medical man to its acceptance by a barrister who should undertake the defence of any delinquent out of fifteen hundred in consideration of receiving a penny a week from each. The comparison cannot be pushed very far. The medical man is far more indispensable to respectable working people than the barrister, and we must act accordingly. There is nothing discreditable in the provident arrangement, provided that the rates are fair and that only fit persons are included in it. Dr. Renaud himself admits this when he defends the club system and argues for its extension. As to the abuses of the present charities, he urges the appointment of a trustworthy officer to examine all recommendations. He says, properly, that the committee of every charity is under a moral obligation to see that the funds are not squandered on persons whose benefit is not contemplated by the subscribers. On the other hand, he thinks subscriptions will fail if provident dispensaries are to control the privileges of recommendation enjoyed by subscribers. He regards this part of the scheme as "a compulsory clause intended to drive the working classes into a particular institution, officered by a particular class of medical men, for which they have not hitherto manifested any particular desire; whereas, if left to themselves, they will seek relief through the medium of the existing institutions, which in Manchester, as elsewhere, are officered by physicians and surgeons of known and proved ability."

HOSPITAL FOR CONVALESCENTS FROM SCARLATINA.

A MOST valuable suggestion has been lately put forth by the resident medical officer of the London Fever Hospital, Mr. Mahomed, and is published in the current report of this institution. The suggestion is that a convalescent hospital for the special use of patients recovering from scarlet fever should be created. The terror of families stricken with scarlet fever is not ended when convalescence sets in or has become far advanced. It continues for at least two or three months during the process of desquamation. And for this long period the convalescent, even the recovered patient, carries about with him the *materies morbi*, which is capable of being easily detached from his body and as easily conveyed to those about. This is a huge risk, for the limitation of which a convalescent hospital of good size, that would accommodate desquamating patients, supply them with a proper system of baths for hastening desquamation, and the means of disinfecting all their clothes, should be established in the neighbourhood of London. We have rarely heard a more important proposal, or one more

worthy of the support of those who have the power to realise it. Scarlet fever is a disease to be averted by every means that civilisation and science can devise.

THE FINANCES OF THE GENERAL MEDICAL COUNCIL.

PURSUANT to Act of Parliament, the General Medical Council renders an account of receipts and expenditure, both for itself and the Branch Councils for England, Scotland, and Ireland respectively, for the year ending January 5th. By order of the House of Commons on April 17th, these accounts are now printed. We have already given the particulars of these accounts, and commented on them. The Council, as we said, is getting rich. Including the balances in hand at the beginning of the year of the Scotch and English branches, amounting to £4921, the general receipts amounted to £10,261 6s. 10d. The following are a few items of expenditure of interest:—£1774 10s. to members of Council; £598 10s. to visitors of examinations; salaries of the officers of the General Council, as distinguished from those of the Branch Councils, £550; printing, stationery, &c., ditto, ditto, £793 0s. 8d.; investments, £2066; balance, £3516 16s. 10d. We have before remarked on one generous item in the accounts—namely, £1 0s. 3d. liberally contributed by the Council towards defraying the expenses of prosecution for false use of titles.

THE ADULTERATION ACT IN DUBLIN.

DR. CHARLES CAMERON, analyst to the City of Dublin, has issued his report for the year 1873. We find that 386 samples of food and drink were analysed in the period, of which 108 were found adulterated, 262 pure, and 16 specimens which, while unadulterated, were of bad quality. Of the adulterated articles, milk was deteriorated with from 12 to 120 per cent. of water, but with no other adulterant. The bread was adulterated with alum, and in some instances contained large quantities of sandy matter; the latter also entered into the composition of flour. The tea was made up of exhausted and decayed leaves, strengthened by the addition of stringent gums. The coffee was adulterated with chicory and burnt sugar. The rum was wholly spurious, and consisted of new whisky sweetened with treacle. The butter examined contained no foreign matter, but some samples were rancid and unfit for use. Twenty-three well-waters were tested, sixteen of which proved to be loaded with dangerous organic impurities, and utterly unfit for use. Fourteen specimens of green wall-papers sold in the city were examined, and all were found to be coloured with arsenical green. The fines and costs imposed on forty-three persons convicted of selling adulterated food amounted to £252 11s. Of the persons convicted of selling diseased and unsound meat, ten were sent to prison for terms varying from fourteen days to three months.

FEVER BEDS AT MOSS SIDE.

ACCORDING to the *Manchester Guardian* of the 20th ult., a letter from the medical officer was read at a late meeting of the Moss Side Board of Health disclosing an extraordinary state of things in Moss-lane East, near the Board-room. In excavating a plot of land there for building purposes, the workmen came upon a mass of stuff composed apparently of a mixture of night soil and the refuse from some dye-works. This very agreeable combination was reached a short distance below the surface of the soil, and it must be deemed by its present proprietors a rather unsatisfactory site, on sanitary grounds, for the erection of a building of any kind. The chairman of the board had inspected the spot in question, and he pointed out that it was another example of the infamous practice of landowners allowing pits on their land to be filled up with any kind of refuse, and some years afterwards selling the ground for building sites. He would like to know what was the legal power of the board in such matters, as the township was dotted over with a great number of pits which would be in just the same position some years hence, unless some steps were taken. After some discussion, the clerk to the board said there was no doubt that they had the power to stop the erection of the building in question until the site had been rendered satisfactory to the officer of health, and notice must be served on the owner to that effect. Bad as this state of things is, we cannot avoid asking ourselves whether there are not other places where the ground intended for building purposes has been honeycombed by pits filled with organic refuse of all kinds? No wonder that enteric fever occupies such a prominent position among the list of the fatal diseases of this country.

CHANGES IN THE ARMY MEDICAL DEPARTMENT.

WE understand that certain changes are to take place immediately in the Army Medical Department. The present medical chief at Netley, Dr. Balfour, proceeds to Gibraltar, which is henceforth to be a Surgeon-General's charge, Dr. Fraser, C.B., vacating Aldershot to assume Dr. Balfour's post at Netley. Dr. Charles A. Gordon, C.B., proceeds to Aldershot, being relieved at Dover by Deputy Surgeon-General Dr. Home, K.C.B., V.C. At the head-quarters of the Army Medical Department it is understood the following changes will take place:—Dr. Rutherford, C.B., will succeed Sir Wm. Muir, K.C.B., as head of the Sanitary Branch, and Dr. Munro, C.B., will be Dr. Rutherford's successor in charge of the Medical Branch. The vacancy caused by the promotion of Sir William Muir to the post of Director-General, and the increase to the Surgeon-General's list by Gibraltar being considered a Surgeon-General's charge, have promoted Drs. Gordon and Rutherford to the rank of Surgeons-General. Dr. Bent, the present principal medical officer of Gibraltar, will probably succeed Dr. Munro in the Devonport district.

THE HOSPITAL SATURDAY MOVEMENT.

AT the meeting of the Leicester-square Committee on Saturday last, on the motion of Lord Brabazon, it was resolved to invite all the metropolitan members of Parliament to become members of the committee. Their acceptance of this invitation may add to the respectability of the movement, but it cannot add to the representative character of the Leicester-square Committee, as Lord Brabazon argued. The objection to this committee is that it is not the creation of a public meeting of working men, that it is not representative of the working men of the metropolis, but only of a section of them. Great variety of opinion obtained with regard to the question of asking the Lord Mayor to become president of the committee, in accordance with a second proposition of Lord Brabazon. But the meeting resolved to defer this question to the expiration of the present Lord Mayor's office. We greatly admire Lord Brabazon's attempts to improve the committee, but he will find it difficult to make it representative of anything so much as of a little hospital and its chairman. It was resolved at the meeting to take steps to form more district sub-committees; to have prepared an alphabetical list of all firms, to be kept by the secretary; to raise a fund to meet preliminary expenses, and to hold an open-air meeting in Bermondsey-square, under the presidency of Sir Charles Dilke, M.P., and others in Shadwell, Poplar, and Kensington.

SIR PATRICK DUN'S HOSPITAL: ARMY MIDWIVES' CLASS.

FIVE years ago, at the suggestion of the King's Professor of Midwifery, the authorities of Sir Patrick Dun's Hospital obtained the sanction of H.R.H. the Commander-in-Chief to establish a school for training the wives of soldiers stationed in Ireland as midwives and nurses for service in their respective regiments. During this period upwards of 200 soldiers' wives have been trained in the hospital maternity, and have taken out their diplomas in midwifery. The women so trained came from sixty-five regiments, including household troops, artillery, cavalry, and line. The great benefit conferred by this training upon the regiments and women belonging to them has attracted the attention of Her Majesty the Queen, who, within the last few days, has expressed her intention to become the patroness of the Army Midwives' School in Sir Patrick Dun's Hospital.

The King's Professor of Midwifery is appointed by the King and Queen's College of Physicians, who have recently expressed their sense of the importance of a proper supervision of the education of women professing to act as midwives by establishing an examination, and granting their licence to such midwives as shall pass it. We understand that it is in contemplation to obtain the licence of the College in future, in addition to the diploma of the hospital, for the soldiers' wives trained as midwives in this school.

TREATMENT OF CHOLERA BY THE HYPODERMIC INJECTION OF CHLORAL HYDRATE.

THE supplement to the official *Gazette of India* contains a report from the civil surgeon, Kheri in Oudh, with copies of communications from Dr. Hall and the Deputy Surgeon-General Indian Medical Service, Lucknow Circle, on the treatment of cholera by the hypodermic injection of chloral hydrate. It appears that Dr. Hall, in a paper published in the *Indian Annals of Medical Science* for March, 1870, stated that in the cold stage of cholera, instead of exhaustion of the nervous system, as was generally supposed, there is intense irritation of certain sets of nerves. He suggested that the principle which should guide us in the treatment of this condition was the endeavour to quiet the nervous system by the action of pure sedatives, and recommended the practice of hypodermic injection of sedatives in the stage of collapse. Subsequent experiments as to the physiological effects of chloral hydrate induced Dr. Hall to make a trial of this agent in cholera, and his practice has been followed by others with satisfactory results, so far as the reports at present extend.

GROUSE DISEASE.

PROFESSOR DOUGLAS MACLAGAN reinforces the opinion of Drs. Cobbold and Crisp, that grouse are liable to the inroads of a small thread-worm in vast quantities. The birds in which he has found these worms are commonly known as "piners," while there is no trace of disease in their organisms whatever. It is quite clear, he thinks, that Drs. Cobbold and Crisp are right in thinking that a certain number of grouse perish from this form of worm-disease simply by inanition and exhaustion. Professor Maclagan, however, is not prepared to assert that this is the grouse disease which decimates our moors from time to time. There is, he thinks, no definite line between birds free from, and birds suffering from, the disease—all birds, grouse especially, being exceedingly liable to parasites. The subject needs further investigation, which proprietors and lessees of moors should encourage, if only to ascertain how the disease originates.

ALTERATIONS OF THE GANGLION CELLS OF THE SYMPATHETIC IN INFLAMMATION.

MR. ROBINSON, of New York, has recently followed the changes undergone by the sympathetic ganglion cells in the physiological laboratory of Professor Stricker, and gives the results of his investigations in the *Medicinische Jahrbücher*. He finds that the peculiar coarsely-granular aspect characterising the ganglion cells in health disappears in inflammation; the surface becomes furrowed; and, finally, the body of the cell breaks up into small segments. These changes may affect either the whole cell or only a part. The changes are rendered visible by acting on the cells with chloride of gold, and it may then be seen that the processes given off from the cells undergo a similar course of degeneration. Some carefully made drawings accompany the paper.

MINING ACCIDENTS.

THE calamity at Dukinfield is a loud warning against the carelessness with which the miner uses his lamp. He will insist on leaving the wire-cage open—the dangerous atmosphere of the mine notwithstanding. Even when he closes it, the wire-work has so often been battered or beaten in by negligence, that to call the lamp a "safety" one is a complete misnomer. We trust that in future legislation on mines, adequate provision will be made against an abuse which too often invites explosion, and surrounds the pit-mouth with distracted widows and orphans.

AT the last meeting of the St. George, Hanover-square, Committee of Works, Dr. Corfield made the following suggestions regarding the working of the Adulteration Act:—That it should not be necessary in court to prove knowledge of adulteration on the part of the vendor; that the word "suspected" (of being adulterated) should be either omitted or explained; that it should be compulsory on tradesmen to supply, on payment, the inspector with a sample of any article exposed for sale; that purchasers when buying articles for analysis should give notice of their intention at the time; that the certificate of the analyst should be considered sufficient evidence, and that the analyst should not be required to attend before the magistrate and testify unless the statements in the certificate are disputed; and, lastly, that the penalties recoverable under the Act be paid to the authorities prosecuting. These suggestions were referred to the Law and Parliamentary Committee.

A HANDSOME and well-ventilated mortuary has been erected in Islington on a piece of ground lying between the Holloway and Liverpool roads, and in a most central part of the parish. The building contains commodious rooms for making post-mortem examinations for the coroner's court, and for witnesses, and is provided with air-tight glass coffins, lavatories, &c. One room is set apart for the bodies of persons who have died of contagious diseases. We hope the authorities of other parishes will follow the example set in Islington. Clerkenwell especially is a district in which a mortuary is urgently required, although we have reason to believe that the blame of not providing one does not rest with the vestry.

MR. C. MEYMOTT TIDY, medical officer of health for Islington, reports that the death-rate of the parish during the last few weeks has been 19·7 per 1000—a low figure as compared with the mortality prevailing in other districts of the metropolis. Nearly half of the deaths were those of children under five years of age. Three samples of water were examined with satisfactory results.

THE fellows and members of the Midland Medical Society have forwarded to the Mayor of Birmingham a memorial urging on him the necessity of erecting a hospital for infectious diseases in the town, an institution that shall be open to all except paupers, who are considered to be adequately provided for by the guardians of the poor. The need of such a hospital for the town is made apparent when we state that nearly 24 per cent. of its death-rate last year was caused by seven zymotic or infectious febrile diseases. There is ground for believing that the number of small-pox cases officially reported in Birmingham is considerably below the number actually in existence. The reasons for concealing the disease are numerous, and, among certain classes, insurmountable in the absence of efficient means of isolation. We have no doubt that a recommendation coming from so important a body of men will be speedily carried into effect.

ON the recent resignation by Mr. Reginald Harrison of the office of Registrar to the Liverpool Royal Infirmary School of Medicine, the following resolution was passed by the Council of the institution:—"That this Council accepts with great regret the resignation of Mr. Harrison as Registrar of the School, an office which he has held for the past nine years. The members desire to express their sincere thanks to him for the able, zealous, and efficient manner in which he has performed his duties, and to record their opinion that the School is largely indebted to him for the aid which he has rendered in promoting its interests and raising it to its present state of prosperity."

THE Sanitary Committee of the City Commissioners of Sewers have recommended that the salary of the medical officer of health for the City should be fixed at £500 a year, and that of the food analyst at £200, but that if those offices were conferred on the same person, the salary for both should be £600 a year. Candidates for the appointment will be advertised for at once. In consideration of Dr. Letheby's long services as medical officer of health, he will be appointed honorary consulting medical officer of health for the City of London.

IN the House of Lords, on Tuesday evening last, the Earl of Carnarvon stated that Dr. Samuel Rowe, who had served under Captain Glover's command in the late war on the Gold Coast, would, in recognition of his services, be made Companion of the Order of St. Michael and St. George. We congratulate Dr. Rowe on obtaining his well-merited distinction. Probably no man connected with the expedition worked harder than he did in his threefold capacity of doctor, interpreter, and, at a pinch, wielder of the deadly Snider.

AT a meeting of the Poplar District Board of Works on Monday last, Dr. Talbot, the medical officer of health, reported the outbreak of enteric fever at Bromley Marsh. The disease first appeared in a house the water-supply of which was derived from a surface-well; and it was contended by Dr. Talbot that sewage matter had percolated from a neighbouring cesspool into the well. The Board ordered that a report on the drainage and water-supply of the houses be brought up at its next meeting.

AFTER the annual general meeting of the governors of the Hospital for Women, Soho-square, to be held on Monday next, at 3 o'clock P.M., a further special meeting will take into consideration the expediency of repealing or altering certain of the rules of this institution and of making new ones, and of passing such resolutions on the subject as the meeting may think desirable.

THE extremely warm weather which we experienced last week appears to have had a beneficial effect on the public health in this country. In France, on the contrary, where in many parts the temperature during the same period exceeded eighty degrees in the shade, an increased death-rate was made evident. The returns showed the existence of a large amount of enteric fever, especially at Lyons, and a great fatality from diseases of the throat. One case of cholera was registered.

TWENTY-SIX professors in the Scottish Universities have signed a petition to the Premier, directing attention to the case of the ladies admitted to matriculation as students of medicine in Edinburgh University, and afterwards denied the opportunity to graduate. The petitioners urge upon the Government the desirability of the whole question of the University education of women being taken into consideration.

THE Metropolitan Board of Works is now practically testing a patent ventilator for carrying off foul gases from the sewers of London, and will shortly report on the subject. In some districts sulphurous acid and chlorine gas are used, under the direction of the officials of the Board, for destroying sewer effluvia.

ON Saturday, the 18th ult., a testimonial and address were presented to Dr. Murchison, in recognition of his efforts in arresting the progress of the typhoid epidemic which prevailed last year in the parish of Marylebone. The address, which was signed by about a hundred persons, was delivered by Sir Thomas Watson.

THE Medical Society will hold a *conversazione* at its rooms, 11, Chandos-street, Cavendish-square, on Monday next, on which occasion the Annual Oration will be delivered by Mr. Brudenell Carter. We believe the subject of the oration will be "On the Waste of Life involved in Preventable Mortality."

THE number of deaths registered in London last week was 1300, a mortality considerably below the average. The deaths included 410 from phthisis and diseases of the respiratory organs, 39 from measles, 22 from scarlet fever, 55 from whooping-cough, 22 from different forms of fever, 12 from diarrhœa, and 2 from small-pox.

AT a late meeting of the St. Pancras Ratepayers' Association, a resolution was passed calling on the vestry of the parish to institute more stringent measures for the efficient sanitary inspection of the district. The meeting considered that house-to-house visitation was necessary to thorough inspection.

THE gold medal for the best essay "On Diseases of the Articular Cartilages," the subject given for competition by the students attending the meetings of the Dublin Pathological Society, has been awarded to Mr. Kendal M. Franks, B.A., and the silver medal to Mr. George Forsyth.

GLASGOW has just enhanced her efficiency as a medical school by founding two chairs—one of clinical surgery, one of clinical medicine—each with an endowment of £100 a year.

A FATAL case of Asiatic cholera occurred at Dordretcht, in Holland, at the beginning of the week. The epidemic is reported to have disappeared from Munich.

THE spot where Dr. Livingstone is buried in Westminster Abbey is now marked by the inscription in large letters cut in the floor, "David Livingstone, 1874."

PRINCIPLES OF HOSPITAL CONSTRUCTION.

BY JOHN SUTHERLAND, M.D.,
Member of the Army Sanitary Commission, &c. &c.; and
CAPTAIN DOUGLAS GALTON, C.B., F.R.S.,
Director of Public Works and Buildings, &c. &c.

No. V.—WARD DETAILS.

Window space.—The extent of glass surface to be provided in the ward plan should be sufficient for lighting all parts of the ward equally. In some hospitals the windows have been placed at the ends only of the wards, leaving a certain proportion of the beds in the middle of the ward-length without sufficient light and ventilation. In all new and improved hospitals light is admitted along each side and at one end of the ward. In practice, one window for every two beds, besides the end window, is found sufficient. In new St. Thomas's Hospital there is a window for every bed, which is more than enough for light, or at all events would be so provided the lighting of the wards were not interfered with by the lofty ward walls opposite. In some other recently constructed hospitals, of which Winchester is an instance, there is similarly a window for every bed, but the windows are only half the width of the ordinary window, and they are therefore much less heavy than wide windows and easier to open and shut.

Every window affords means of natural ventilation, but by increasing either the number or superficial area of windows beyond what is absolutely required for lighting, the ward air loses heat, and in cold weather streams of cooled air from the glass are apt to fall on the patients in adjacent beds. The extent of glass surface has no relation to the ventilation of a ward, although it has a relation to the ward temperature. The amount of natural ventilation in a ward can be rendered sufficient by one window for every two beds, and an end window for special use at night as proposed. The windows should extend from 2 ft. or 2½ ft. from the floor to within a foot of the ceiling, and, these measurements being adopted, the amount of window area will be determined by the breadth of the window.

At Lariboisière Hospital the window space is 30 square feet per bed. In the great Military Hospital at Vincennes the area is 24 square feet per bed, and this area, including in it the end window, has been adopted for the Herbert Hospital, and is there sufficient for all purposes. In order to save heat, the Herbert Hospital windows are made of British plate glass. Double windows, or even double panes of glass with an air space between them, have been used to save ward heat. On the whole, plate glass makes the best window.

The windows should all open top and bottom; the top sash by means of cords and pulleys. In some positions, windows constructed to open either partially or entirely in transverse sections have been used with advantage.

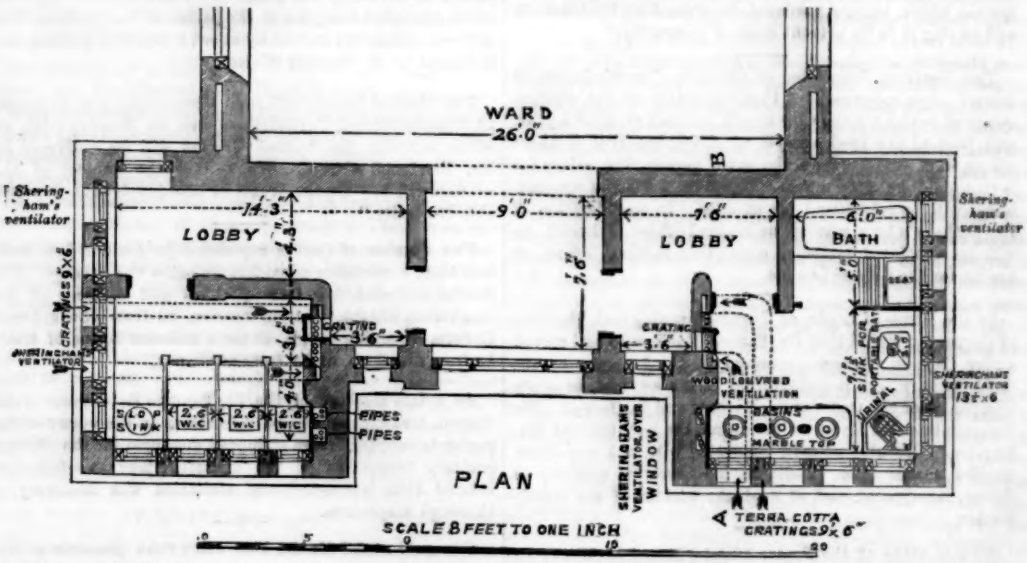
Wall space.—Adjoining beds should not be closer to each other along each wall space than 3 feet. Assuming the beds as 3 feet broad, two beds and the 3 feet space between would require 9 feet of wall space between adjacent windows.

Internal finishing.—The internal finishing of the wards should be as plain as possible. There should be neither ornamental timbering nor cornices, nor indeed any ledge whatever on which ward dust can rest. The mere displacement of dry organic matter from dusty cornices may give rise to serious mischief in surgical wards.

Ward walls.—The best finishing for internal ward walls and ceilings has not yet been decided. The best plaster is absorbent, and after a time requires scraping and renewing or limewashing. Hence repeated washings with quicklime and water (not whitewash) have been used in many hospitals, together with scraping of the surface at intervals. Thorough painting of the plaster, to be afterwards polished, has been used; also a scagliola surface. All these materials, however, are absorbent after a time.

Many years ago a close, dense cement capable of receiving a polished surface was tried in a number of hospitals, including the Herbert Hospital. Cements of this class are absorbent, although less so than plaster. They admit of frequent cleansing by washing with soap and water, which is an advantage. They are nevertheless apt to become clouded or stained by absorbed impurities. The best cements of this class fulfil sanitary requirements more nearly than any wall surface yet introduced, and, when washed, a slight

FIG. 2.—HERBERT HOSPITAL, WOOLWICH: LAVATORIES ETC. AT END OF WARDS.



addition of Condy's fluid to the water would oxidise any remaining organic deposit.

Ward floors.—The best ward floor is that made of dense-grained wood, such as oak. The joints should be tightly closed, the surface smoothly worked, saturated with beeswax, and polished by friction as often as required. The great advantage of floors of this class is that they require no washing. To keep them in good order all that is required is to sweep and dust them, and to sponge up with as little water as possible any accidental impurities that may have fallen on the floor; but the surface must be maintained in good condition by the use of a polishing brush and a little beeswax. Pine floors oiled and varnished have been used, but polished oak floors are best.

Ward drainage.—The drainage arrangements of every ward require special attention, so that all drain communications should be outside the ward walls. It is safest also to divide the drainage into separate sections—viz., those connected with waterclosets and ward slop-sinks and those for removing waste water from lavatories and baths. The best position for lavatories and waterclosets is at the far end of the ward, one division being placed on each side of the end window. The division containing the waterclosets should be to leeward with prevailing winds, in order to keep chance effluvia from entering the wards during high winds.

The accompanying plan (Fig. 2), adopted at the Herbert Hospital and in regimental hospitals of recent construction, will show the arrangements, together with the position of doors and windows, adapted for thorough ventilation of the compartments independently of the ward.

In some recent hospitals the waterclosets, baths, &c., have been placed in a separate square block at the end corners, connected with the ward by a narrow passage having a window on each side. This affords sufficient isolation and enables the elevation of the building to be varied. The essential principle to be kept in mind is that between the ward and these conveniences there should be a lobby lighted and ventilated on opposite sides, and that the waterclosets and baths should be so placed with regard to winds that no effluvia should ever be blown into the ward—a result which is arrived at in the Herbert Hospital. It is important to point out that the superficial areas and cubic contents of these compartments should be no larger than is required for use. Beyond this all is useless expenditure and may lead to stagnation of air.

Another essential principle is that the waste-pipe from every watercloset, sink, and basin should be trapped before it joins the down-pipe; and that all the down-pipes from the waterclosets, baths, lavatories, sinks, and urinals should not only be carried down the outer wall of the building and trapped below where they join the drain, but these down-pipes should be carried up above the roof of the building and left open for ventilating the down-pipes. In this way any reflux of sewer air into the building becomes impossible. A cap or box containing charcoal placed over the opening of the down-pipe above the roof would effectually prevent nuisance from accidental air-currents.

(To be continued.)

SOCIETY FOR THE RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.

THE annual general meeting of this Society was held on April 22nd, by the kind permission of the Royal Medical and Chirurgical Society, in their rooms, 53, Berners-street, Mr. Charles Hawkins, vice-president, in the chair. A letter was read from Sir George Burrows, president, regretting his unavoidable absence from the meeting in consequence of an engagement of long-standing to act as steward at the festival of the Royal Medical Benevolent College. The secretary read a statement of the affairs of the Society for the past year, from which it appeared the available income for payment of grants and expenses had been £3013, the grants £2530 to 56 widows and 34 children, the expenses £208, leaving a balance of £275 to meet any fresh application for assistance. Legacies of the value of £1500 had been received. The funded property had been increased by the purchase of £1772 New 3 per Cents. (stock). The list of members showed a further decrease of 8, the Society consisting of 9 honorary, 159 life, and 229 subscribing members. During the year the Society had lost by death two vice-presidents, two directors, and one of the treasurers. The usual business of such meetings having been concluded, the meeting was made special to consider some alterations in the bye-laws, proposed by the acting treasurer, Mr. Fuller. The alterations, with slight amendments, were carried, and referred for confirmation to the next general meeting to be held on May 13th. The alterations were to facilitate the election of members, and to give the directors, in the case of members of some standing, obliged, through ill-health, to discontinue their subscriptions, the power of granting some assistance to their widows and children. A vote of thanks was passed to the editors of the medical journals. After the usual thanks to the chairman, the meeting was brought to a close.

The officers of the Society take this opportunity of earnestly requesting the members to attend the meetings. It was with the greatest difficulty on this occasion the required quorum of nine could be formed to constitute the meeting.

Correspondence.

"Audi alteram partem."

"PUNIC FAITH."

To the Editor of THE LANCET.

SIR,—At page 604 of your last number, there is a copy of letters from one of my colleagues at King's College and Hospital, Dr. Playfair, which he had originally addressed to the Committee of the hospital. My name is specially referred to therein, and you have also honoured me with mention in your article on "Punic Faith" at page 597.

As Dr. Playfair has addressed that letter to at least four different authorities, I shall not ask you to permit me to answer in such a way as to suit for all these high tribunals, but in courtesy to yourself and "Punic Faith," I must express to you my regret that Dr. Playfair did not send to you a copy of a letter which I had addressed to him on the subject in question, which was in his hands long before the publication in your columns of the copy of his letter to the Committee. My letter was as follows:—

"DEAR DR. PLAYFAIR,—In answer to your note of yesterday's date and that of this evening's receipt, I have to state that I informed the secretary of King's College Hospital of the knowledge I had obtained of the authorship of the article in the *British Medical Journal* which had caused him so much personal offence. I certainly did not address the editor of that *Journal* officially as president of the British Medical Association, my ideas of the duties pertaining to that honourable office being widely different from such a view of that position; but casually the fact that one of my colleagues, Dr. Playfair, was the author of the article in question was unreservedly put into my possession. Sympathising as I do with the secretary of King's College Hospital in the various unwarrantable attacks which have been circulated in recent years on his personal character and as to the manner in which he discharges his official duties, I was glad to be able to let him know the source of one of them.—I remain, dear Dr. Playfair, yours very faithfully,

"WM. FERGUSSON."

This letter would have saved the necessity of some of your pertinent inquiries in "Punic Faith."

I have no idea, Sir, who the "powerful personage" may be who is supposed to have "exercised firm, not to say violent, pressure on the Editor"; but I say emphatically, humbly, or presumptuously, supposing that I may be referred to as that exalted individual, that I did nothing of the kind.

I hope that I have as high respect for the confidential position of an editor as anyone can hold; but I believe that, under certain circumstances, it may be best to expose the sources of "coloured reports" which implicate professional standing and involve the life-means of those referred to.

I have the honour to remain, yours faithfully,

George-street, Hanover-square, April 28th, 1874. WM. FERGUSSON.

To the Editor of THE LANCET.

SIR,—As you have published and commented on the letters that have passed between the committee and secretary of King's College Hospital and myself, I must beg you also to publish the accompanying correspondence. It may serve to throw some light on this unhappy dispute, which is the first, and I earnestly trust also the last, in which I have had the misfortune to be involved.

You will observe that the editor of the *British Medical Journal* distinctly states that the authorship of the offending article was communicated to Sir William Fergusson "confidentially"; Sir William Fergusson as distinctly asserts that my name was placed "unreservedly" at his disposal. Between these two contradictory and irreconcilable statements as to a matter of fact it is not, of course, my province to decide. I think, however, that there is at least sufficient *primâ facie* evidence of a breach of official confidence to justify the action I have taken in the matter.

I am, Sir, yours obediently,

Curzon-street, Mayfair, W., April 27th, 1874. W. S. PLAYFAIR.

5, Curzon-street, Mayfair, April 15th, 1874.

DEAR SIR,—I have received from the secretary of King's College Hospital a letter saying that he had heard "from a reliable source" that I was the author of an article on the nursing at King's College Hospital that appeared in the *British Medical Journal* of February the 14th. As no one but the editor of the *Journal* was aware that I had written the article in question, I naturally asked him if he was Mr. Waldron's informant. He replies as follows:—"Of course I have not, nor shall I give up the name of the author of the article. I mentioned it confidentially to Sir William Fergusson, but I think it impossible that he should have taken the information so given to the secretary." I am most unwilling to believe that one of my colleagues, holding the distinguished position of President of the British Medical Association, could have divulged a confidential communication made to him by the editor of the *Journal* of the Association over which he presides. There is nothing in that article of which I am ashamed, and I have, therefore, at once acknowledged its authorship. Moreover, I have already expressed to the secretary my regret that one paragraph is worded in a manner capable of a construction that it was not intended to convey. I confess, however, that it would be a great satisfaction to me to be assured that the suspicion which naturally arises as to the source from which the secretary received this information is unfounded, and, therefore, I shall be glad if you will inform me if you communicated to anyone the confidential information you received from the editor of the *Journal*. I am, dear Sir, faithfully yours,

To Sir Wm. Fergusson, Bart, F.R.S., President of the British Medical Association. W. S. PLAYFAIR.

5, Curzon-street, Mayfair, April 16th, 1874.

DEAR SIR,—I much regret to be obliged to press you for an answer to my letter of yesterday. In the event of your being unable to assure me that you have not communicated to anyone your confidential conversation with the editor of the *British Medical Journal*, it will be my painful duty to lay the facts of the case under the consideration of the Committee of Council of the British Medical Association. As that body meets to-morrow, and not again for three months, you will understand why I am constrained to beg for a speedy reply. I shall not communicate with the chairman of the committee before 10 A.M. to-morrow. If I do not hear from you before that hour I shall assume your silence to be a tacit acknowledgment of the breach of confidence on your part which Mr. Hart's letter and verbal assurance to me have caused me to suspect. If before that you can assure me that this suspicion is groundless, it will be a real and unfeigned pleasure to me to offer you my sincere apology for this correspondence. In the former case I shall consider myself to have good grounds for feeling aggrieved; for I shall owe it to your indiscretion that I have been subjected to much personal annoyance, to the threat of an action for libel, and to the unpleasantness of having been made the topic of comment and discussion in my hospital and school.

I reserve to myself the right of giving this correspondence such publicity as I may deem advisable.

And I am, dear Sir, faithfully yours,

To Sir Wm. Fergusson, Bart., F.R.S., President of the British Medical Association. W. S. PLAYFAIR.

[The letter of Sir William Fergusson, dated April 16th, will be found quoted above.]

5, Curzon-street, Mayfair, April 17th, 1874.

DEAR SIR,—I beg to acknowledge the receipt of your letter of yesterday's date, which I regret I am unable to accept as a satisfactory explanation of the facts of the case. I am in possession of the written statement of the editor of the *Journal* that my name was communicated to you "confidentially." He informs me also that you, the President of the Association, called on him at his office, and complained of the tenor of an article which had appeared in the official organ of the Association. Anxious to justify himself for its insertion, he told you that it had been written by one who had as good opportunities of forming an opinion on the points at issue as yourself, and thereupon he told you the name of the author. He further assures me that the greatest care is always taken that the names of writers of articles in the *Journal* should never be disclosed; that they are not made known even to the members of the Committee of Council; and that he would never have thought of divulging my name to you in this instance had you not been the President of the Association. I fancy there are few who would consider information acquired in such a manner as being other than privileged and confidential. As the question of the inviolability of the authorship of articles in the *Journal* is of great interest and importance to its contributors, I carry out my intention of laying this correspondence before the Committee of Council.

I am, dear Sir, faithfully yours,

To Sir Wm. Fergusson, Bart., F.R.S. W. S. PLAYFAIR.

5, Curzon-street, Mayfair, April 17th, 1874.

SIR,—I have the honour to request that you will submit the accompanying correspondence for the consideration of the Committee of Council. As a member of the Association, and as a contributor to its *Journal*, I have to beg that the Council will inform me if the action of the President of the Association in divulging a confidential communication made to him by the editor of the *Journal* meets with its approval.

I am, Sir, your obedient servant,

To George Southam, Esq., Chairman of the Committee of Council of the British Medical Association. W. S. PLAYFAIR.

British Medical Association General Secretary's Office, 37, Great Queen-street, W.C., April 20th, 1874.

DEAR SIR,—I handed your communication of Friday last to the President of the Council, who placed the same before the Committee of Council of that day. It was referred to the next meeting of the *Journal* Committee, who will report to the Committee of Council upon it.

I am, yours faithfully,

To W. S. Playfair, Esq., M.D. FRANCIS FOWKE.

*** This correspondence discloses a very pretty quarrel as it stands. We shall for the present reserve our comments, only venturing to point out that the question of fact still remains between the Editor and Sir Wm. Fergusson whether the name of the writer was communicated "unreservedly," or "confidentially" to Sir William "in his capacity of President of the British Medical Association."—ED. L.

THE HOSPITAL FOR WOMEN.

To the Editor of THE LANCET.

SIR,—I should not have thought it necessary to notice Dr. Meadows's letter in your issue of last Saturday, notwithstanding its apparent *animus*, had he not asserted that I have "recklessly misrepresented three facts"—viz., that

1. His party "rejected the rules of the customary Medical Committees."

2. They "took upon themselves the power of an inquisition to make judicial inquiry into the private character of the matron."

3. They "requested the house-physician to give a written statement of his reasons for resigning," and, as I stated, "of his opinion of the matron and nurses."

1. The customary rules of the Medical Committee allowed only the senior officers to vote. Setting aside these, they resolved themselves into a meeting of the staff, at which all were permitted to vote.

2. The inquisition into the private character of the matron appears in the details of the judicial inquiry entered fully in the minute-book of the Medical Committee.

3. In the discussion at the meeting alluded to it was urged, in opposition to my protest, that it was right to ask Dr. Gairdner the reasons for his resignation, and the resolution, correctly quoted by Dr. Meadows, resulted from that discussion.

I am, Sir, your obedient servant,

PROTHEROE SMITH.

Park-street, Grosvenor-square, April 27th, 1874.

OPERATION KNIVES.

To the Editor of THE LANCET.

SIR,—For some time past I have been using two instruments which I had made expressly for my own use; but from the great satisfaction they have given me I am induced to ask you to devote a small space in THE LANCET to bring them before the surgical public.

The one is a modified cornea knife, much shorter and somewhat thicker than the old ones. It is well known that

frequently before the old knife was well through the cornea its point was against the patient's nose; this was especially the case with patients whose eyes were deep set. My knife avoids this, acting as it does as a combined knife and chisel.

The other is a knife for the various amputations and ex-

cisions of the foot. Its merits to me are, that it is light, long, narrow, and very strong, enabling the operator to have his hand well away from his work, thus not obstructing his view; its narrowness enabling him to pass it readily between the bones; its proportionate strength precluding the chance of its breaking. I have found this a most useful instrument and it is made for me by Messrs. Maw, Son, and Thompson, of Aldersgate-street, as is also the other instrument, from whom they can be procured.—I am, Sir, yours &c.,

JAMES NICHOLLS, F.R.C.S. (Exam.)

Obituary.

FLORENCE McCARTHY, M.R.C.S., &c.

WE regret to record the death, under the distressing circumstances which have been already made public, of Surgeon Florence T. McCarthy, of the Army Medical Service. The sad event occurred while the deceased officer was on his way home from the Gold Coast, where he had well performed the duties devolving on him in connexion with the Ashantee expeditionary force. Mr. McCarthy had escaped the insidious poison of the climate until his embarkation on board the mail steamer *Liberia*, when, on the vessel's arrival at Sierra Leone, he felt so unwell that he landed, in order to return by the *Victor Emanuel* hospital-ship, then daily expected. While on board the latter ship, fever of a severe type was developed, and was accompanied with paroxysms of delirium, which rendered it necessary that he should be constantly watched. On March 15th, while the *Victor Emanuel* was at anchor, he managed to elude the vigilance of the two nurses placed over him, and threw himself into the sea, through a port-hole, at 9.15 P.M. Although the sea was literally swarming with sharks at the time, two officers immediately sprang in after him, and continued to swim and dive about for some considerable time—an act of heroism surely deserving recognition and reward in high quarters. The lifeboat was also lowered, and active search made for the unfortunate officer. No trace of him, however, was found.

Mr. McCarthy was the third son of Alexander McCarthy, solicitor, of Cork. He was born in October, 1835, and joined the army in April, 1859. He served with distinction in India, and his name was more than once mentioned in favourable terms in General Orders. His numerous friends in Cork intend erecting a monument to his memory, and a considerable sum has been already subscribed for the purpose. At a recent meeting of the Town Council of Cork, a warm tribute of respect was paid to his memory, and a vote of condolence passed to his bereaved family.

WILLIAM EDWARD DILLON, L.R.C.S.I.

AMONG the minor tragedies connected with Livingstone and the search expedition, the death of this promising naval officer by his own hand takes an outstanding place. Mr. Dillon had been appointed to the search expedition in 1872, and his career in Central Africa was a succession of seizures of malarious fever. Recovering partially from the last attack, he had started with Lieutenant Murphy for Zanzibar with Livingstone's body, when a final and more formidable seizure supervened. In the delirious stage he destroyed himself.

Mr. Dillon took the licentiateship of the Royal College of Surgeons of Ireland in 1859, and in 1860 entered the Royal Navy as an assistant-surgeon. After several years of foreign service, he obtained leave of absence to take part in the African expedition. He was the son of W. Sandys Dillon, Esq., of Brookfield, county Dublin, and nephew of the late Hon. Sir William Jeffcôtt, Recorder of Penang and Singapore, and of the late Sir John Jeffcott, Chief Justice of Adelaide. Before this expedition Mr. Dillon had made extensive travels in Africa, South America, and India, and displayed an enterprise, a cheerful intrepidity, and a fecundity of resource well qualifying him for his last and fatal mission. A wide circle of relatives and friends bewail his loss.

SURGEON H. A. BALE, R.N.

IN the list of officers who lost their lives in the Ashantee Campaign must be included the name of Mr. H. A. Bale, Surgeon R.N., of H.M.S. *Bittern*, who volunteered for the Glover Expedition, and died at Ossoom, the last station along the road south of the Prah, whilst serving with it on the 19th of January last. In recording the death of this medical officer, we have been requested to bear testimony to the great regret which all the officers of Glover's force felt for his loss. We happen to know that Dr. Rowe, the principal medical officer of that force, had formed a very high opinion of his professional skill, and Captain Glover had officially recorded his thanks to Mr. Bale for the good service he had rendered, especially in having, from the 27th December to the 11th January, pushed forward in command of the advance, when Lieut. Cameron, who was nominally in command, was incapacitated by sickness from doing so.

AT the meeting of the Academy of Medicine of Paris on the 14th ult., Professor Owen was elected Foreign Associate. Messrs. Donders and Hocker were his competitors. At the same meeting Sir Dominic Corrigan, Bart., was elected Foreign Correspondent over Dr. Schwann of Liège, and Dr. West of London.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND. — The following gentlemen, having passed the required examination for the diploma, were duly admitted Members of the College at a meeting of the Court of Examiners on April 23rd:—

Alden, John Horatio, Ely, Cambridgeshire.
Alsop, Thomas O. F., Birmingham.
Birch, Philip, Lichfield.
Crespin, Edgar R. S., Torrington-square.
Collins, Charles E., Ware, Herts.
Dalton, Charles Bernard, L.S.A., Whitehaven.
De Brent, Mortimer John, Greenwich.
Evans, Thomas D. F., Birmingham.
Garland, Albert I., L.R.C.P. Edin., Glasgow.
Jameson, Hampden G., Clapham.
Moir, Gerald C. A., Bayswater.
Moorhead, Thomas R. H., M.B., Westbourne-park.
Owen, Charles William, Kennington.
Roots, William Henry, Kingston-on-Thames.
Tyson, William Joseph, Folkestone.
Utting, John, Hockering, Norfolk.
Williams, Frederick Mann, Newcross.

Of the 76 candidates admitted to examination on the 20th, 21st, and 23rd of April, 22 failed to satisfy the Court, and were referred to their professional studies for six months.

APOTHECARIES' HALL. — The following gentlemen passed their examination in the Science and Practice of Medicine and received certificates to practise on April 23rd:—

Elliot, John, Bernard-street, Russell-square.
Fitz Rayne, William Allen, Tooley-street, Borough.
Tipple, Edwin, Erith, Kent.
Turtle, James Henry, Medway Priory, Chatham.

The following gentlemen passed their Primary Professional Examination on the same day:—

Potts, Edward, Queen's College, Birmingham.
Schlesinger, Maurice Martin, St. Mary's Hospital.

At the preliminary examination in Arts, held at the Hall on April 24th and 25th, fifty-six candidates presented themselves, of whom twenty-two were rejected, and the following thirty-four passed and received certificates of proficiency in general education:—

FIRST CLASS (in order of merit). — 1. Edith Shove. 2. Henry Hoole. 3. Edgar Atlee Hunt. 4. Henry J. G. Wilkins. 5. Elizabeth Vinson.

SECOND CLASS (in alphabetical order). — T. E. Abbott, F. W. Apthorpe, F. A. N. Bateman, W. L. Batson, H. H. Bovill, C. D. Briggs, C. H. Daniell, W. A. Davies, L. M. Earle, J. W. Evans, John Floyd, Isabella M. Foggo, J. Harran, J. H. Harris, F. Jennings, John Jones, E. E. King, Agnes M'Laren, A. M. Megginson, W. Megginson, H. Powell, Jane R. Rorison, J. L. Rubel, Arthur Savory, W. F. Smith, D. Thurston, F. Wells, David J. Williams, G. F. C. Williams.

The Examiners in Arts direct the attention of candidates and their teachers to the answering of the English paper in the current examination. Classifying the 56 candidates present according to the merit of their answers to the English paper, the Examiners find that 40 have done *badly*, 12 fairly, and *only* 4 *well*. It is noteworthy that of the male candidates only one-fourth, while of the female candidates five-sixths, have answered fairly or well.

UNIVERSITY OF ABERDEEN. — At the late Medical Graduation term the following candidates, after the usual examinations, received degrees in Medicine and Surgery:—

DEGREE OF M.D.

Koch, Edwin Lawson, L.M.S. (Calcutta), Colombo, Ceylon.
Norton, Edward, L.R.C.P. Lond., M.R.C.S., London.

At the same time the following gentlemen received promotion to the degree of M.D.:—

Adams, George Edward D'Arcy, M.B., C.M., Nailsea, Bristol.
Campbell, William, M.B., C.M., Kinellar.
Elliott, Frederick William, M.B., Lower Norwood, Surrey.
Fasken, William Andrew Durnford, M.B.
Garden, Robert John, M.B., C.M., Aberdeen.
Godson, Clement, M.B., C.M., London.
Johnstone, Hugh, M.B., C.M., Burmah.
Jotham, George William, M.B., C.M., Kidderminster.
Lawrence, Alfred Edward Aust, M.B., C.M., Clifton, Bristol.
Lightbourne, James Ashburner, M.B., C.M., Preston.
Mackenzie, Duncan John, M.B., C.M., Mopley, Manchester.
Marshall, Lewis Walter, M.B., C.M., Gen. Hosp., Nottingham.
Milne, Thomas, M.B., C.M., Ellon.
Wilkin, John Frederick, M.B., C.M., Folkestone.
Wright, Francis Jas., M.B., C.M., County Asylum, Prestwick.
Wyness, James Davidson, M.B., C.M., Aberdeen.

DEGREE OF M.B.

Alexander, John, Aberchirder, Banff.
Allardyce, James, Gartly, Aberdeenshire.
Cartwright, James Henry, London.
Collins, Walter Charles Grosett, Chew Magna, Bristol.
Cossham, William Raymond, Clevedon, Somerset.
Craig, John Smith, Duncanston, Leslie,
Craigmile, Alexander, M.A., Aberdeen.
Dantra, Sorabshaw Hormasji, Bombay.
Fehrsen, James M'Call, South Africa.
Gray, Robert Aikman, Aberdeen.
Hay, Francis, M.A., Peterhead.
Holland, Lucius, Wylam-on-Tyne.
Ilott, Herbert James, Bromley, Kent.
James, Arthur Culver, London.
Laing, James, Grange, Peterhead.
Lawrance, Patrick James, Old Deer, Aberdeenshire.
Macdonald, Donald John, Madras.
M'Combie, John, M.A., Aberdeen.
Milne, John, South Bank, Yorkshire.
Milne, Robert, Midmar.
Morgan, John Theodore, Colombo, Ceylon.
Morice, Robert James, M.A., Old Aberdeen.
Newman, Alfred Kingcombe, Madras.
Robertson, Frederick Marrant, Cape Town, South Africa.
Sheppard, William Thomas, Manchester.
Smith, Henry Barton Liddell, London.
Smith, Robert Gordon, Arbroath.
Stevens, Alfred Felix, London.
Strickland, Henry George Travers, Isle of Wight.
Swaine, Charles Lethbridge, Tirhoot, Bengal.
Trail, Alexander Forbes, Pitsligo.
Trevor, Frank Wollaston, Welshpool.
Williamson, William Herbert, Aberdeen.
Willmott, Julius John Eardley, Weston-super-Mare.

DEGREE OF C.M.

Alexander, John.
Allardyce, James.
Collins, Walter Charles G.
Cossham, William Raymond.
Craig, John Smith.
Craigmile, Alexander.
Dantra, Sorab. Hormasji.
Fehrsen, James M'Call.
Gray, Robert Aikman.
Hay, Francis.
Holland, Lucius.
Ilott, Herbert James.
James, Arthur Culver.
Koch, Edwin Lawson.
Laing, James.
Lawrance, Patrick James.
Macdonald, Donald John.
M'Combie, John.
Milne, John.
Milne, Robert.
Morgan, John Theodore.
Morice, Robert James.
Newman, Alfred Kingcombe.
Robertson, Fredk. Marrant.
Sheppard, William Thomas.
Smith, Henry Barton Liddell.
Smith, Robert Gordon.
Stevens, Alfred Felix.
Strickland, H. Geo. Travers.
Swaine, Chas. Lethbridge.
Trail, Alexander Forbes.
Trevor, Frank Wollaston.
Williamson, William Herbert.
Willmott, Julius J. Eardley.

UNIVERSITY OF ST. ANDREWS.—The following gentlemen, having passed the required examination, obtained the degree of Doctor of Medicine on April 24th:—

Cox, Richard, L.R.C.P.E., M.R.C.S., Theale, Reading.
Ginders, Alfred, L.R.C.P.E., L.F.P.S. Glas., Normanton.
Gregory, George, L.R.C.P. Lond., L.S.A., Bolton.
Harris, Arthur B., M.R.C.S.E., L.S.A., Falmouth.
Hollings, Robert, M.R.C.S.E., L.S.A., Wakefield.
King, Wm. Talbot, M.R.C.S.E., L.S.A., London.
M'Carthy, Denis A., L.R.C.P., Staff Surg. R.N., Queenstown.
Squire, William, M.R.C.P., M.R.C.S., London.
Thomson, William C., L.R.C.P.E., F.P.S.G., Partick.
Weaver, James, L.R.C.P., L.S.A., Longton.

THE new wing of the London Hospital, now in course of erection, will include a well-arranged mortuary.

THE epidemic of small-pox at Bradford shows no signs of abatement. There are at present nearly sixty cases under treatment in the Fever Hospital of the town.

FRENCH HOSPITAL AND DISPENSARY.—The sixth annual festival of this institution was held last Saturday at Willis's Rooms. It appeared from the report that during the past year 151 in-patients and 3237 out-patients were treated at the hospital.

PUBLIC HEALTH.—The authorities of the Charing-cross Hospital Medical School, recognising the fact that "Public Health" comprises subjects belonging to distinctly different branches of science, have appointed three gentlemen—a chemist, a physician, and an engineer—to give the lectures. Mr. Heaton, the lecturer on chemistry, Dr. G. V. Poore, and Mr. Eassie, C.E., whose name is well known in connexion with sanitary engineering, will each give six lectures. The introductory lecture will be given on Tuesday, May 12th, at 2 P.M., by Dr. Poore.

THE HEALTH OF DUBLIN. — From the Registrar-General's report for the first quarter of the year, we learn that the births registered in Dublin during that period amounted to 2218, being equal to 28 in every 1000 of the population; and the deaths to 2112, or 27 per 1000. The deaths from scarlatina were unusually numerous, being 170, and equal to one in every 12·4 of the total deaths; convulsions caused 149; to fever 105 were ascribed; whilst bronchitis was the most fatal malady of the quarter, the mortality amounting to 307; phthisis ranking next, with 240. The mean of the mean weekly temperature for the quarter was 42·6°, and the rainfall during the thirteen weeks measured 4·633 inches.

Medical Appointments.

BARLOW, Mr. T. (University College Hospital), has been appointed Medical Registrar to the Hospital for Sick Children, Great Ormond-street, vice Beach, resigned.

BARNES, R., M.D., has been appointed Consulting Physician for the Diseases of Women and Children to the Hospital for Diseases of the Nervous System, Portland-terrace, Regent's-park.

BELLAMY, E., F.R.C.S.E., has been appointed Lecturer on Anatomy in the Charing-cross Medical School.

BRITTON, T., M.D., has been appointed a Physician to the Halifax Infirmary and Dispensary.

CARTWRIGHT, S. H., M.R.C.S.E., L.D.S., has been appointed Assistant Dental Surgeon to King's College Hospital.

CASS, S. T., L.R.C.P.Ed., M.R.C.S.E., has been appointed Resident Medical Officer to the Kilburn Dispensary.

DALGLISH, R. R., M.R.C.S.E., L.S.A.L., has been appointed Admiralty Surgeon and Agent for the Dymchurch and New Romney Division, vice Wood, resigned.

DUNNAGE, A. E., M.R.C.S.E., has been appointed an Assistant-Surgeon to the Central London Ophthalmic Hospital.

HIGGENS, C., F.R.C.S.E., late Assistant-Surgeon, has been appointed a Surgeon to the Central London Ophthalmic Hospital.

HUME, G. H., M.D., L.R.C.S.Ed., has been reappointed a Surgeon to the Hospital for Sick Children, Newcastle-on-Tyne, on the expiration of his term of five years.

LYNN, R. D., M.D., L.R.C.P.Ed., has been reappointed a Surgeon to the Hospital for Sick Children, Newcastle-on-Tyne, on the expiration of his term of five years.

MORGAN, Mr. T. C., late House-Surgeon to the Moorfields Ophthalmic Hospital, has been appointed Surgeon to the Manchester Eye Infirmary.

PRITCHARD, U., M.D., F.R.C.S.E., has been appointed Pathological Registrar of King's College Hospital, and Curator of the Anatomical Museum, vice Kelly.

PROCTER, J., M.R.C.S.E., has been appointed Public Vaccinator for the Tunstall District of the Wolstanton and Burslem Union, vice Edwards, resigned.

PYE-SMITH, P. H., M.D., F.R.C.P.L., has been appointed Honorary Consulting Physician to the British Orphan Asylum, Mackenzie-park, Slough, vice Phillips, deceased.

REDMOND, J. J., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer and Public Vaccinator for the Ullid Dispensary District of the Waterford Union, vice Parks, deceased.

RUTHERFORD, W., M.D., F.R.S. (Professor of Physiology in King's College, London), has been appointed an Assistant-Physician to King's College Hospital, vice Kelly.

SMITH, P. B., M.B., C.M., has been appointed Medical Officer to the Aberdeen Dispensary, vice Inglis, resigned from ill-health.

SPENCER, J. A., L.K.Q.C.P.I., L.R.C.S.I., has been appointed Medical Officer for the Dunglow Dispensary District of the Glenties Union, Co. Donegal, vice Creery, deceased.

WHITAKER, J. T., M.B., has been appointed Resident House-Surgeon to the new Eye Infirmary, Glasgow.

YOUNGER, E. G., L.R.C.P.L., M.R.C.S.E., L.S.A., has been appointed Assistant Medical Officer to the Metropolitan District Asylum, Caterham, vice Eliot, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BOSTOCK.—On the 23rd ult., at Chichester, the wife of Alfred S. Bostock, M.R.C.S.E., of a son.

CRABBE.—On the 20th ult., at Springbank-terrace, Aberdeen, the wife of W. Thomson Crabbe, F.R.C.S.Ed., of a son.

CRAVEN.—At Traill-street, Thurso, Caithness-shire, the wife of John Craven, L.R.C.P.Ed., L.R.C.S.Ed., of a son.

PEIRCE.—On the 19th ult., at Bryn Villa, Brynmawr, the wife of J. E. Peirce, M.R.C.S.E., L.S.A.L., of a son.

SAUNDERS.—On the 23rd ult., at Elmstead-wood, Chislehurst, the wife of Wm. S. Saunders, M.D., of a son.

VALENTINE.—On the 26th of March, at Jeypore, Rajputana, India, the wife of Dr. C. S. Valentine, F.R.C.S., Physician to His Highness the Maharajah, and Inspector of Dispensaries, Jeypore, of a daughter.

MARRIAGES.

BREWER—JONES.—On the 23rd ult., at St. James's, Blackheath, Alexander H. Brewer, Surgeon, Queen's-road, Dalston, to Louisa S., daughter of the late J. D. Jones, M.D., of Kidbrooke, Blackheath.—No Cards.

NEWMAN—BRIGHT.—On the 9th ult., at St. Luke's, Cheltenham, Anthony John Newman, Esq., of Bowness, Windermere, to Fanny Charlotte, third daughter of Dr. James Bright, M.R.C.P., of Wellington-square, Cheltenham.

DEATHS.

ALLIN.—On the 20th of Feb., at Echuca, Victoria, Australia, John Wesley Allin, M.R.C.S.E. (only son of Rev. John Allin, of Pembroke, Wales), aged 28.

LIGHTFOOT.—On the 20th ult., at sea, on his way from Padang to Batavia (of dysentery), Robert Lightfoot, M.D., of Newcastle-upon-Tyne, and Medical Officer in the Dutch Expedition to Acheen, aged 30.

MANLEY.—On the 8th ult., at Rydal Mount, Manchester, Edmund Manley, M.B., aged 46.

PATERSON.—On the 22nd ult., at Brigg (at the residence of her son-in-law, Decimus M. Robbs, Solicitor), Maria Susanna, relict of the late Robert Haldane Paterson, Surgeon, in her 80th year.

SPICER.—On the 25th ult., at Chard, Somerset, Richard William Spicer, F.R.C.S.E., aged 72.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

POOR-LAW MEDICAL OFFICERS' ASSOCIATION.

THE following memorial will shortly be presented to Parliament:—

To the Honourable the Commons of Great Britain and Ireland in Parliament assembled.

The humble petition of the undersigned Poor-law Medical Officer or Officers, sheweth—

That whereas the greater portion of our annual outlay of £8,000,000 for poor relief is expended on the maintenance of the sick, and those dependent on them, and whereas the administration of such relief in the provincial towns and rural districts of England and Wales is, owing to the great extent of many of the districts—the limited stipends paid to, and the provision of all medicines by, the medical officers—most unsatisfactory, and wholly and palpably inadequate to meet the requirements of the poorer classes; and whereas the Local Government Board having, in a circular letter dated March 23rd, 1874, recommended the guardians to request that their medical officers should perform additional duties under the Public Health Act, 1872, but have omitted to make any provision for the payment of such extra services, your petitioners respectfully pray that your honourable House will see fit to reform such system of medical relief by establishing district dispensaries as recommended in the Report of the Royal Sanitary Commission, as well as by those Poor-law inspectors who were deputed to institute inquiries into the question of out-door medical relief, and which district dispensaries have been found to work so beneficially in Ireland in diminishing sickness and mortality, and in curtailing poor relief expenditure. Your petitioners also pray that no additional duties be imposed on district medical officers, unless provision be made to provide suitable remuneration for such increased services.

That whereas, by an Act passed in the session of Parliament, 1870, Boards of Guardians were authorised, with the sanction of the Local Government Board, to grant to Poor-law medical officers who, by reason of infirmity, length of service, or advanced years, were incapacitated from efficiently performing their duty, superannuation allowance to such amount as might be deemed under the varied circumstances advisable; and whereas, in accordance with such permission, some medical officers have been superannuated, whilst in many other instances officers equally entitled have been distinctly refused superannuation, notwithstanding efforts made by the Local Government Board in their behalf; your petitioners respectfully pray that your honourable House will take this serious matter into consideration, and make such amendment of the law as will render it compulsory on Boards of Guardians to provide reasonable and suitable superannuation of medical officers.

*** It will be seen from the above that another attempt is to be made to force upon Government the recognition of the claims of Poor-law medical officers to have extra pay for extra work. Notwithstanding that a contemporary has endeavoured at once to flatter the Premier and to throw cold water on this movement, we hope that the Poor-law medical officers will stick to their text.—ED. L.

METEOROLOGICAL READINGS

(Taken by Steward's Instruments).

THE LANCET OFFICE, APRIL 30TH, 1874.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp.	Rainfall.	Remarks at 8 A.M.
Apr. 24	30·20	WNW	52	55	91	66	47	...	Overcast
„ 25	30·15	W.	56	59	86	68	54	...	Overcast
„ 27	30·23	E.	53	57	107	76	50	...	Fine
„ 28	30·26	E.	53	58	97	65	51	...	Fine
„ 29	30·35	N.E.	45	50	92	60	42	...	Fine
„ 30	30·06	W.	42	47	...	...	38	...	Fine

Notes, Short Comments, and Answers to Correspondents.

AN AUSTRALIAN LIVINGSTONE.

DR. LEICHARDT, the intrepid explorer of the wilds of North-West Australia, has been found dead in a tree by Andrew Hume, who was despatched in 1872 by the Sydney Government to follow in his track. Hume's report, forwarded from Brisbane, represents him as having found Classen, who was Dr. Leichardt's brother-in-law, and second in command, with the blacks at the head of Stewart's Creek. Classen, he says, "is detained by the blacks as a sort of wonder-man." From him he received an account in German of the fate of the expedition, according to which, it would appear, Leichardt's party mutinied, and, after the struggle with their leader, left him pushing on to the north-west coast. While the mutiny was going on Classen was away in quest of water; and on his return found that Leichardt had been insensible, and had died five days after the mutiny. The camp had been broken up, and the horses taken away by the men. Hume possessed himself of Dr. Leichardt's quadrant, watch, and manuscript register to the extent of 75 pages. We await further and more detailed particulars of the fate of a traveller second only to the great missionary explorer we have lost in philanthropic impulse and scientific accomplishment.

Mr. W. C. F. Smith cannot get a licence in midwifery without first taking a medical or surgical qualification.

DOCTOR IN ABSENTIA.

OUR remarks on bogus degrees have elicited a host of correspondents, one of whom, an enthusiastic Teuton, tries to rectify the moral frontier by asserting that England is as much a "doctor-monger" as Germany. Our answer is, that for one advertisement from the degree manufacturers in the English papers, six appear in the German ones. *Kladderadatsch* (the Berlin *Punch*) for the 10th ult. contains, along with the same advertisement cited by us in our issue of April 18th, the following:—"Doctor-diplome jeder Facultät werden leicht und billig vermittelt. Addressen Dr. S. an die annonc. Exped. von Haach & Rabehl, Berlin, W." Even respectable journals like the Augsburg *Allgemeine Zeitung* (the German *Times*) admit such advertisements freely. From no seat of learning in these islands can degrees be got by advertisement. Our correspondent must prove that such is the case in Germany before he convinces us that the advertising degree-monger pursues an unprofitable "industry." We are indebted to him, however, for having run to earth a certain "Professor in London," to whose advertisement we gave gratuitous publicity a fortnight ago. Our correspondent, it seems, wrote to him for a degree. He received in answer a request to address him (the Professor) at Jersey, enclosing £20, while a promise was given that he would try to make the examination as easy as possible. On rewriting to know of what University he was to become a graduate, he was told it was the "American University of Philadelphia." He wrote again (frugally omitting to enclose the £20), and stated that he approved the terms, but preferred a German degree. To this the "Professor" replied that "at present it was absolutely impossible to procure a German degree either for love or money." But, again we ask, how does the doctor-monger find his account in advertising so freely in Germany? There must be a market for such merchants somewhere; and, we repeat, it would have been better for Prince Bismarck to have boasted that he would suppress the "bogus-doctors" than that he would put down the "Professors," to whom Germany owes the realisation of her dreams of unity.

THE LIVINGSTONE [MISSIONARY MEMORIAL.

To the Editor of THE LANCET.

SIR,—As Secretary of the Edinburgh Medical Missionary Society, I am very grateful for the friendly and appreciative notice which appeared in THE LANCET of April 25th regarding the proposal for a Livingstone Missionary Memorial. It is both pleasant and encouraging to have the contemplated scheme brought so very prominently before the medical profession, thousands of whom are probably at this moment yearning to testify their respect for the great explorer and medical missionary, without seeing how to do it in a suitable and appropriate manner. To all such persons the plan which we suggest, and which you approve of, cannot fail to afford a satisfactory solution of their difficulty. Let me here say, that were each member of our common profession to contribute the moderate sum of one pound to this memorial edifice, the result would be more than achieved, without the aid of the general public.

I must advert, however, to one sentence of the article, in other respects so excellent, to which all who know the history and experience of our Society cannot fail to take exception. "As a rule," the writer says, "the young men attached to the Society have been much stronger in theology than medicine; and the service has been rather discredited by the ignorance they have sometimes displayed when face to face with disease or surgical injury." I am certain that this remark is entirely inapplicable to the young men educated under the auspices of the Edinburgh Medical Missionary Society. It is true, probably, as regards many self-constituted medical missionaries, who, with a mere smattering of medical knowledge, have rashly attempted to heal the sick as well as to preach the gospel. But the principle on which we proceed is, that all our young men are thoroughly educated surgeons, and must possess either the diploma of the College of Surgeons or the M.C. and B.M. degrees of the University. Moreover, many of our former students have proved themselves to be not only successful, but distinguished surgeons. The names of Mr. J. Elmslie, who performed 204 surgical operations, many of them serious, during his last short summer in Kashmir; of P. K. Vartan, of Nazareth, whose fame is spread far and wide in Syria; of Andrew Davidson, of Madagascar, distinguished as a lithotomist and a writer on Surgery; of John Lowe, our present superintendent, who in South Travancore gained a name for surgery—not to mention others both dead and living,—may suffice to prove that the impression intended to be conveyed in the sentence quoted is really without foundation. It would be strange were it otherwise, because if any lesson is taught our students more emphatically than another it is this: that a medical missionary is nothing, and worse than nothing, if he is defective in surgery.

Again thanking the writer for his advocacy in your valuable journal,

I am, Sir, yours faithfully,

Edinburgh, April, 1874. BENJAMIN BELL, F.R.C.S.E.

Vegetarian.—The Lycoperdon giganteum. It is a large species of puff-ball, edible in its young state, but its matured spores are poisonous.

Mr. R. J. Carey is thanked for his courtesy.

INJECTION OF MILK INTO THE VEINS IN POST-PARTUM HÆMORRHAGE.

To the Editor of THE LANCET.

SIR,—In the last few numbers of your journal I observe many letters on the transfusion of blood in post-partum hæmorrhage. Doubtless it may often occur that neither venous nor arterial blood can be obtained; but milk can be in almost any situation, and why should not this be tried? In almost every recorded case of the injection of fluids into the veins we read that immediate good effects are produced. Recently I noticed in a medical periodical a short summary of some cases of cholera, in which milk was injected by Drs. Hodder and Bovell, of Toronto. I have been aware of these cases for years, and the suggestion has occurred to me from having had them again so recently brought to my mind. Yours truly,

Port Blair, March 1st, 1874. S. F.

Chiron.—The new Eye Infirmary for Glasgow was opened on Monday last. The waiting, surgical, dispensing, ophthalmoscopic, and attendants' rooms are well appointed, and the dormitories will accommodate 64 persons.

Mr. Leeming, (Kendal.)—Mr. Williams's book, lately reviewed in our columns, will meet our correspondent's requirements.

THE letter of *Mr. James A. Gasen* shall be published next week.

THE RESIDENT MEDICAL OFFICERS OF KING'S COLLEGE HOSPITAL.

To the Editor of THE LANCET.

SIR,—The recommendation No. 2, page 10, of the Report of the Referees on the Nursing Arrangements of King's College Hospital—"That one of the resident medical officers of the hospital should be a permanent officer of such age and experience, and invested with such authority, as may tend to ensure for him the confidence and deference of the sister in charge, and also of the secretary and matron and junior medical officers"—would, if acted upon, subvert a principle adopted at the foundation of our hospital, and which constitutes an important feature of our school.

I cannot think that Lords Hatherley and Selborne have had explained to them the great alteration in our system which the proposed appointment would bring about, although it appears they have had before them "some of the medical officers."*

An opinion in favour of the change in question has, I am well aware, been entertained for many years by some very influential persons interested in the hospital; but before such a proposal was definitely made to the Committee of Management of the hospital, the views of the staff and others most concerned ought surely to have been ascertained. The new post proposed could not, I think, be made without the sanction of the Council of King's College, and I do not think the Council have been consulted.

I fear many persons may be unduly influenced against our system of resident appointments, which has now been acted upon for more than thirty years, by such a phrase as "very young men." The Governors are not told that these "very young men" are in all cases members of a College or Hall, and duly registered as medical practitioners of the United Kingdom, many of them possessing more than one medical diploma, and not a few being graduates of the University of London. Moreover, the "very young men" are the most distinguished students of our school, who have served several practical appointments in the hospital with the greatest credit, and they are selected by examination. The sort of men who have filled these posts can be easily ascertained by anyone who will glance over our list, and then refer to a list of the teachers and officers of the London and provincial medical schools and hospitals and infirmaries. As far as I am able to judge, our plan has in practice worked admirably; and though it is different from that adopted in most hospitals, I believe I can show that it has been carried out to the advantage of the patients, to the satisfaction of the physicians and surgeons, and of the Committees of King's College Hospital since its foundation. Before, therefore, a system which has been of such immense advantage to our school is abandoned, I hope full consideration will be given to the matter, and the special question, which is far more important than many would suppose, be discussed in all its bearings.

My own feeling, as an old house-physician, is, I need scarcely say, very strongly in favour of our present system; but though I am quite sure I can recount its merits, I am not so certain that I am fully alive to its faults. More than one hundred practitioners have passed through one or other of these resident offices in King's College Hospital, and I should like to hear what some of them think on the matter. In my own case I owe very much to the advantages I enjoyed while a resident. The work upon which my first paper was based was performed while I held office. Then was laid the foundation for future scientific medical work afterwards carried out; and immediately after my term of office had expired, practical effect was given to ideas developed when I was in the hospital, and working under my old masters, Drs. Todd and Budd; and last, but not least, such knowledge of disease was acquired as can only be gained by constantly working at the bedside, under a sense of real responsibility, and not merely as a curious and interested observer and note-taker. I am sure I should have been called by Lords Selborne and Hatherley an "extremely young man," and I looked younger than I was; but in those days there were few complaints, and the relation between the Committee and the residents was as pleasant as could be desired. Many of the members considered us very young, I dare say; but, upon the whole, as much deference was paid us then as would now be paid to "a permanent resident medical officer of maturer years," and we were treated with kindness, confidence, and friendship.

For thirty-four years we have got on well without a permanent resident, and I cannot see why we should not go on as well for fifty years more. The "differences" are of very recent origin, and in no way connected with the medical work of the hospital. It seems, therefore, scarcely fair that we should suffer on account of the disagreements of others. Our system is, I know, adopted in very few hospitals; but that fact proves nothing against it. Why should our hospitals lose their individual traits, and all be forced to adopt one uniform system of management? Uniformity of administration excites the admiration of some minds; but, at least in England, many different systems meet with a pretty equal share of success and support. Some desire to make us all work in one way in one groove; but that all can never be so made to work is perfectly certain.

If the appointment of a "permanent resident medical officer of maturer years" would solve the difficulties under which we suffer, even those who feel most strongly in favour of our old and well-tried system might be induced to agree to it being modified; but there is no reason to suppose that the effect desired would follow. The referees pertinently remark that without a reasonable and conciliatory spirit no good can be expected to follow from their recommendations or from any others that might be made. Is there not every reason to think that if the "reasonable and conciliatory spirit" could be restored, the differences between St. John's House and the Committee of Management of the hospital would be arranged without the necessity for modifying the principles upon which our resident medical officers have been appointed ever since our hospital opened its doors to the sick poor. I remain, Sir, your obedient servant,

Grosvenor-street, April 28th, 1874. LIONEL S. BEALE.

* It does not appear from the Report whether any member of the permanent staff of the hospital was present, nor is it clear whether the term "medical officers" includes only the "very young men" referred to in a subsequent page.

CHLORAL IN THREATENED MISCARRIAGE.

DR. MARTINEAU lately stated at a meeting of the Society of Therapeutics of Paris that a woman, seven months and a half pregnant, was admitted last year under his care at the Hôtel Dieu. She was suffering from ague, and was treated by sulphate of quinine. Uterine pains came on, either from the effect of the quinine or the intermittent fever, and to prevent miscarriage an enema with laudanum was administered. This was of no avail; but a few enemata of hydrate of chloral were effectual—the contractions ceased, and eventually normal parturition took place on the 15th of March last. The chloral was also successful in the case of a patient of M. Martineau's, four months and a half in the family way. She had an attack of pleuro-pneumonia of the right side, and was twice cupped. Four days afterwards pains occurred, and a red flux was taking place from the vagina. M. Martineau ordered an enema of fifteen grains of hydrate of chloral to four ounces of water, and three such enemata were given at twelve hours' interval. These had the desired effect; the pneumonia was cured in nine days. No miscarriage had taken place, and the patient again felt the movements of the child.

Mr. Chas. Hammond should address himself to the General Medical Council.

UNUSUAL EFFECT OF A SMALL DOSE OF CHLORAL HYDRATE IN A CHILD.

To the Editor of THE LANCET.

SIR,—The following case is, I think, worthy of record from the unusual as well as alarming symptoms produced by a small dose of chloral, and as the drug is a very "fashionable" and undoubtedly valuable remedy at present, it is well that anything novel in its therapeutic history should be made known. In a somewhat large experience of the remedy amongst children as well as adults in England and in India I have never met with a similar case, nor am I aware of such having been published in the scientific journals.

L. J. C——, a strong, healthy child, aged three years and a half, had been suffering for some days from an attack of bronchial catarrh, with a dry irritating cough that prevented him from sleeping. The ordinary remedies having failed to give relief, I prescribed four grains of chloral hydrate as a hypnotic, thinking it would allay nervous sensibility (the child had suffered from croup some weeks previously) and give him a good night's rest. Ten minutes after it was administered I was hastily summoned by the nurse, and found the little patient in an alarming state of collapse, almost moribund. The pulse was hardly perceptible; the breathing hurried, short, and stertorous; the countenance livid; frothing at the mouth; pupils dilated and insensible to light, with complete insensibility of the conjunctivæ. These symptoms rapidly increased; the pulse got weaker and more flickering, for a moment or two could not be felt at all; the respiration became shorter and shorter; and death seemed imminent. Then a change took place, and the child rallied; the pulse got stronger; stertor ceased, and the breathing became deeper; the countenance lost its lividity; sensibility returned, and in half an hour all anxious symptoms had subsided. The child fell into a deep sleep, which lasted for twenty hours, and the accident—for so I must call it—was followed by no ill-effects whatever. The case was really one of "chloral poisoning." The treatment consisted of efforts to rouse the system. At first a small quantity of mustard-and-water as an emetic was administered, and the child was slightly sick; but inability to swallow shortly followed, and no stomach-pump was at hand. Cold water was dashed on the face and chest; ammonia to the nostrils; brandy rubbed on the mouth and gums; mustard sinapisms to the neck and calves of legs; mustard-and-water to the feet; and it was shortly after the stimulating effects of these latter that symptoms of returning sensibility set in. The convalescence required no medicinal aid.

I think it well to mention that the bottle containing the chloral was well stoppered and kept in a dry place, and that forty grains of it had been given with impunity to a delicate lady, with no untoward symptoms; while in this case four grains nearly sent a child of four to his last home.

I remain, Sir, yours truly,
ALFRED F. S. CLARKE, M.D.,
Surgeon, Royal Horse Artillery.

Sealkote, Punjab, 1874.

J. C. (111, Hatton-garden) has in his possession a kitten with one head, two bodies, two tails, four hind-legs, two fore-legs in the natural place, and two growing out of the back. The monstrosity would form a curious addition to our anatomical museums.

Mr. N. W. Moore is thanked for his suggestion.

Dr. Longhurst's paper shall be published next week.

FRACTURE OF THE CLAVICLE.

To the Editor of THE LANCET.

SIR,—I should be glad to know whether any of your readers have met with cases of impacted fracture of the clavicle which the following case appears to exemplify.

On the 2nd of March last a strong and muscular man slipped upon the deck of a ship, striking the inner side of his arm, which he states was thrown forcibly outwards and upwards from the side of his body. He immediately complained of much pain over the inner end of the right clavicle, and a deformity precisely resembling that produced by fracture was found to exist over the junction of the middle and internal thirds of the bone; but there was a total absence of mobility at the seat of the fracture; the patient could raise his arm over his head (although slowly and with some pain), and the general attitude of the patient was not characteristic of fracture of the clavicle. Indeed my ready diagnosis, together with that of an experienced military surgeon who saw the case with me, was "old fracture and imposition"! The patient, however, strenuously denied having ever sustained any injury to the bone, and maintained his statement regarding the sudden appearance of the swelling after the fall on deck; besides he was a petty officer of good character and long service, and no motive appeared for the practice of deception. After three weeks' application of Ellis's apparatus the swelling became somewhat smaller, and at this date the patient can use his arm freely.

I am, Sir, yours, &c.,
ROBERT NELSON, R.N.

Botley, April, 1874.

SKIN-GRAFTING.

DR. R. J. LEWIS, Surgeon to the Pennsylvania Hospital, in a reprint from the *Philadelphia Medical Times* of a short paper on this subject, describes a method of detaching pieces of skin, first suggested to him by Dr. C. H. Thomas, which for simplicity, convenience, and painlessness, is preferable to all other methods. It consists in merely penetrating the cuticle with a very delicate sewing-needle, elevating a small point, and shaving off the minute elevation of cuticle and upper stratum of derma with a very sharp knife. The same may be accomplished, but hardly so effectively, by using fine scissors for the excision of the portion transfixed.

A CASE IN OPHTHALMICS.

To the Editor of THE LANCET.

SIR,—No doubt several gentlemen, some perhaps specially qualified, will reply to Mr. Corin's letter in your last issue; still, inasmuch as I have seen most satisfactory results almost invariably attend the method of treatment herein described, not only in my own practice, but also in that of others, I am anxious to ask Mr. Corin to try it. The following is the method above referred to:—1stly. Let the temples and the skin over the mastoid processes be alternately blistered five or six times. 2ndly. Apply red oxide of mercury ointment to the palpebral and ocular conjunctivæ with a camel-hair pencil at least twice a day. The third item in the treatment is the internal exhibition of mercury-with-chalk. The dose will vary according to age. I should fancy that four or five grains, or perhaps three, would answer the purpose for Mr. Corin's patient. It will have to be taken for three weeks or a month. Of course topical applications will often cure such affections; but, judging from what I have seen, the exhibition of the mercury, as above stated, materially expedites the cure. I have known cases which have persistently resisted the above and other topical means, but which have yielded readily to the same applications in conjunction with the internal administration of the alterative.

I am, Sir, yours &c.,
H. T. JONES.

Llanerchymedd, Anglesey, April 28th, 1874.

Astor.—The fees are not dignified nor suggestive of a practice in which partnership would be desirable.

Mr. W. J. Greene had better complain to a magistrate.

DURATION OF PREGNANCY.

To the Editor of THE LANCET.

SIR,—The case related in your impression of to-day by Mr. Wm. Morrell, as to the duration of pregnancy, induces me to mention the following case of which I have the notes.

A married woman was confined in the union workhouse on the 17th May, 1873, and delivered of a male child. Her husband was a sailor, employed in a pilot boat. These boats generally go for a cruise of three months at a time, and this woman informed me that the vessel, needing some repairs, put into harbour for twenty-four hours. Her husband came to her home to see her, and coition took place on the 18th August, 1872, the date being so accurately impressed on her memory by the fact that it was the only occasion on which she saw her husband for three months. Being naturally interested, I made minute inquiries, and also asked the husband, and he informed me that his wife's statement was correct. From my knowledge of the people I have no reason to doubt that it is perfectly reliable. The duration of pregnancy will be seen to be 272 days and a fraction.

Yours faithfully,
CLEMENT WALTER.

Dover, April 18th, 1874.

P.S.—I also have notes of another case in which the duration of pregnancy was 286 days; coition having taken place on the 14th September, 1866, and delivery on the 26th June, 1867.

THE INTERNAL ADMINISTRATION OF CARBOLIC ACID AS A MEANS OF ARRESTING HÆMORRHAGE IN CARCINOMA UTERI.

To the Editor of THE LANCET.

SIR,—I wish to ask, through the medium of your valuable columns, if anyone has tried the therapeutical action of carbolic acid administered internally as a hæmostatic in cases of uterine hæmorrhage? Lately I have had the opportunity of observing its efficacy in two cases of malignant (cancerous) disease of the uterus, where there was severe loss of blood; and at present I have under observation a case of cauliflower excrescence of the os uteri, in which there occurred almost fatal hæmorrhage, which I succeeded in arresting by giving carbolic acid internally, and repeating it in small doses (half a grain) combined with opium to relieve the severe pain of cancer. I need hardly mention that the acid, in addition to its astringent and hæmostatic properties in such cases, does not fail to act antiseptically on the fetid discharges and other secretions of the body.

I am, Sir, your obedient servant,
JOHN C. LUCAS, L.R.C.S.E., &c.

April, 1874.

AN OBSTETRICAL CASE.

To the Editor of THE LANCET.

SIR,—I send you the following particulars of an accouchement which may prove interesting to your readers.

On the morning of the 1st of April, at 2 A.M., I was called to attend one of my patients in her confinement. On my arrival I was surprised to find a very considerable amount of hæmorrhage during the pains, which were strong and very frequent. On examination I found the membranes ruptured, the uterus gradually dilating, and the fœtus having the occiput towards the left acetabulum. Pains continued with the assistance of a one-scruple dose of ergot of rye up to 5 A.M., when I repeated the above dose. Pains came on at short intervals, but no improvement in dilatation of the os since 5 A.M. I endeavoured to pass it over the head, but failed in doing so. Pains continued up to 7.30 A.M., with no better result, and much flooding all the time since my arrival. I then applied the forceps, and extracted the head, when forthwith a large clot of blood, some pounds in weight, appeared, which no doubt got in between the shoulder and head, thus preventing the labour from going on. Hæmorrhage now ceased, and since then the mother and infant (a fine boy) are progressing very favourably.

I remain, Sir, yours, &c.,
J. N. BREDIN, L.R.C.S.I., &c.

Chart Sutton, Staplehurst, April 11th, 1874.

Zoologist.—The great work of Lamarck, "Histoire Naturelle des Animaux sans Vertèbres" was published in seven volumes, we believe, somewhere about the year 1820. He died in Paris in 1829.

Nemo, (Belfast.)—Chloral hydrate has been tried in pneumonia with apparently some success by Dr. Jansen, a Belgian army surgeon.

Dr. Ainsley (Halifax.)—Dr. Brown-Séquard is in New York.

HEREDITY IN CANCER.

To the Editor of THE LANCET.

SIR,—As touching the hereditariness of cancer, a question to which the late discussion specially invites attention, I quote the following statistics drawn up from the experience of a Life Assurance Office.

Year.	Total Deaths	Cancer.	Phthisis	Apoplexy	Heart Disease.	Other causes
1871	78	2	16	10	10	40
1872	89	4	13	8	12	52
1873	105	3	15	12	14	61
Total	272	9	44	30	36	
Or per	1000	36	161	110	132	

The comparatively small mortality from cancer, as compared, on the one hand with phthisis, regarded as hereditary, and, on the other, with apoplexy and with heart diseases, not regarded as hereditary, seems to contrast strongly with Sir James Paget's experience, which experience, I suppose, would influence his advice in the selection of lives.

I am, Sir, yours, &c.,
H. FLY SMITH, M.B. Oxon.

Queen's-crescent, Haverstock-hill, April, 1874.

Alumnus, (Durham.)—Septicæmia and septæmia are both wrong. The former should be septichæmia; the latter sephthæmia.

Dr. Lloyd Owen is thanked for his courtesy.

Mr. Diver, (Caterham.)—We do not think we ought to express any opinion on the matter.

COMMUNICATIONS, LETTERS, &c., have been received from — Dr. Peacock, London; Sir Charles Trevelyan, London; Dr. Lionel Beale, London; Mr. Savory, London; Dr. Barnes, London; Dr. G. Harley, London; Dr. Playfair, London; Dr. Sutherland, London; Dr. Protheroe Smith, London; Dr. Wilks, London; Mr. Fairlie Clarke, London; Dr. Kennedy; Dr. Hughlings-Jackson, London; Dr. Buzzard, London; Mr. F. Bailey, London; Mr. Jones, Anglesey; Dr. Dunnidge, Leeds; Mr. Whittaker, Glasgow; Mr. Wigmore, London; Mr. Walker, St. Andrews; Mr. B. Bell, Edinburgh; Dr. Macdonald, St. Andrews; Mr. Butlin, London; Mr. Carey, Stratford; Dr. Wiltshire, London; Mr. Baker, Birmingham; Mr. Barlow, Manchester; Mr. Jeaffreson, Newcastle; Mr. H. Fly Smith, London; Dr. Longhurst, Portland; Dr. Ralfe, London; Dr. Bright, Cheltenham; Mr. Greene, London; Mr. Holl, London; Mr. Gaven; Mr. Poole, London; Dr. Britton, Halifax; Mr. Harries, Aberystwith; Dr. Valentine, London; Rev. Dr. Haughton, Dublin; Mr. Blackett, London; Dr. A. Le Blond, Paris; Dr. Owen, Manchester; Mr. Harrison, Liverpool; Mr. Fairless, London; Mr. Sewill, London; Dr. Sturges, London; Mr. Baker, London; Mr. Ross, Monaghan; Mr. Forsyth, Darlington; Mr. Mercer, Padiham; Dr. Lyne, Coventry; Mr. Walker, West Bromwich; Mr. Wilson, Alton; Mr. Kerley, Weobley; Mr. Glover, Dorrington; Dr. Westmorland, Manchester; Mr. Kenyon, Bury; Mr. Bakewell, Church Stretton; Mr. Bailey, Hanwell; Mr. Philpots, Swansea; Mr. Foster, York; Dr. MacCormack, Belfast; Mr. Packman, Sheffield; Mr. Brazier, Aberdeen; Mr. Lightfoot, Newcastle-on-Tyne; Mr. Bland, Dorchester; Mr. J. Smith, Manchester; Mr. Pierce, Brynmawr; Mr. Reeves, London; Mr. S. W. Moore, London; Dr. Tibbits, London; Mr. Muriel, Whitehaven; Mr. Walker, Corwen; Mr. Barbour, Greenock; Mr. Quarry, Coleshill; Mr. Holden, Liverpool; Dr. Craven, Thurso; Mr. Little, Peterborough; Mr. Taylor, Auckland; Mr. Tripier, Liverpool; Mr. Roper, Croydon; Mr. Hay, Wolverhampton; Mr. Garland, Yeovil; Mr. Forbes, Glasgow; Mr. Coombe, Plymouth; Dr. Stokoe, Peckham-rye; Mr. Nicholson, Dronfield; Mr. Spicer, Chard; Mr. New, Camden-town; Mr. Collyer, Enfield; Mr. Browett, Coventry; Dr. Hall, Swadlincote; Mr. MacKenner; Mr. Kavanagh, Great Hadham; Mr. Hillyard, Seaford; Mr. Redwood, Rhymney; Mr. Eccles, London; Dr. Grant, Longton; Mr. Marcet, Whitehaven; Dr. Wrangham, Wragby; Mr. Beaman, Billinge; Mr. Lankester, Leicester; Mr. Freeman, London; Dr. Eaton, Cleator; Mr. Amble, Hemel Hempstead; Mr. Dixon, Leeds; Mr. Lawson, Kilmainham; Mr. Watkins, Worcester; Mr. Jordon, Newcastle; Mr. Smith, Woodley; Mr. Forsyth, Elgin; Mr. Doonan, Bolton; Mr. Cornish, Manchester; Mr. Leeming, Kendal; Mr. Davidson, Dorchester; Mr. Stead, London; Mr. J. Smith, Greenwich; Mr. E. Bellamy, London; Dr. Lister, Newton-le-Willows; Mr. Wagstaffe, Swinefleet; Mr. Rendle, London; Mr. Williams, Dinas; Royal Institution; A. B. C.; National Hospital for Paralysis and Epilepsy; Alpha; W. E. S.; M.D.; The Governor of the Apothecaries' Hall of Ireland; Enquirer; Zoologist; Nemo; A Constant Reader; D. L., Manchester; M.R.C.S.; A Subscriber; Alumnus; X. Y. Z.; &c. &c.

Manchester Guardian, Cork Constitution, Macclesfield Chronicle, Welshman, Carlisle Express, Circle, Surrey Advertiser, Scotsman, Isle of Man Times, East London Observer, Glasgow News, West Briton and Cornwall Advertiser, Newcastle Daily Chronicle, Liverpool Daily Post, North Wales Chronicle, Dublin Evening Mail, and *Nottingham Daily Guardian* have been received.

Medical Diary of the Week.

Monday, May 4.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations on the Eye, 1½ P.M.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—2 P.M. General Monthly Meeting.
ST. PETER'S HOSPITAL.—3 P.M. Expected Operation: Lithotrity.
MEDICAL SOCIETY OF LONDON.—8 P.M. Annual Oration by Mr. R. Brudenell Carter, "On the Waste of Life by Preventable Disease."—To be followed by a Conversazione.
ODONTOLOGICAL SOCIETY.—8 P.M. Casual Communications.—Mr. Thomas Bryant, "On Dentigerous Tumours of the Jaws."

Tuesday, May 15.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Rutherford, "On the Nervous System."
PATHOLOGICAL SOCIETY OF LONDON.—8 P.M. Exhibition of the following among other Specimens:—Sarcoma of the Stomach; Malformation of the Heart; Leucocythæmia; Hydatids of the Spermatic Cord; Repaired Fracture of the Sternum; a Bladder several years after Lithotomy; Ulcer of Duodenum from a Case of Death by Burning.

Wednesday, May 6.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2½ P.M.
CANCER HOSPITAL.—Operations, 3 P.M.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Mr. H. J. Slack, "On certain Silica Films Artificially Produced."
OBSTETRICAL SOCIETY OF LONDON.—8 P.M. Dr. Godson will show a remarkable Specimen.—Dr. Copeman, of Norwich, "On Consultation Midwifery in Private Practice."—Dr. Bassett, "On the Propriety of administering Iron during Pregnancy as a Preventive of Post-partum Hæmorrhage."—Dr. Tilt, "On Lymphangitis in Pelvic Pathology."—And other communications.

Thursday, May 7.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Operations 1 P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. W. Noel Hartley, "On the Atmosphere and its Relations to Life."
HARVEIAN SOCIETY OF LONDON.—7½ P.M. Special Meeting of Council.—8 P.M. Mr. J. R. Lane, "On a Case of Aneurismal Dilatation of the Occipital Artery treated by Ligature of the Common Carotid."

Friday, May 8.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
GUY'S HOSPITAL.—Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—8 P.M. Weekly Evening Meeting.—9 P.M. Mr. Sedley Taylor: "An Historical Enigma in the Trial of Galileo before the Inquisition."
CLINICAL SOCIETY OF LONDON.—8½ P.M. Mr. Cripps, "On a Case of Palmar Aneurism."—Mr. Callender will describe and exhibit the Sarcotome for Dr. Hollis.—Dr. H. Weber "On Cases illustrating the Communicability of Consumption from Husband to Wife."—Dr. Donkin, "On a Case of Diabetes treated by Skim-milk."

Saturday, May 9.

HOSPITAL FOR WOMEN Soho-square.—Operations, 9½ A.M.
ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Op rations, 1½ P.M.
KING'S COLLEGE HOSPITAL.—Operations, 1½ P.M.
ROYAL FREE HOSPITAL.—Operations, 9 A.M. and 2 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. R. A. Proctor, "On the Planetary System."

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